

ASIMOV'S

Isaac

SCIENCE FICTION

\$1.75 FEBRUARY 1984

MAGAZINE

**WHAT SEEN
BUT THE WOLF**
GREGG KEIZER

ISAAC
ASIMOV
LEE
KILLOUGH

VIEWPOINT

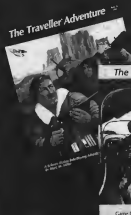
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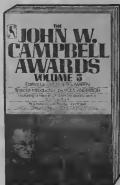
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ASIMOV

SCIENCE FICTION

MAGAZINE

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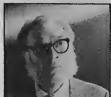
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EDITORIAL

FANTASY



by Isaac Asimov

Some readers have been objecting to a few stories we have published as being "fantasy." We printed one or two of these letters and promptly (and predictably) got a rash of letters objecting to the objection and urging us to include fantasy, if we wished.

This is part of the difference between what I might term the "exclusivists" and "inclusivists" among ourselves. Exclusivists are those people who have firm definitions of what science fiction is and who resent the inclusion of any story that doesn't meet that definition. They would, in other words, exclude the marginal stories. Once you know that, you automatically know what an inclusivist is, don't you? Inclusivists either lack a firm definition, or have one but aren't wedded to it. Either way, they would include all sorts of things.

I, myself, am an exclusivist, in my capacity as a writer and, to a certain extent, as a reader. The science fiction I write is generally "hard," deals with science and scientists, and es-

chews undue violence, unnecessary vulgarity, and unpleasant themes. There is no philosophic reason for that; it merely happens to fit my way of thought. And, as a reader, I tend to enjoy the kind of science fiction I write, and to give but brief attention to other kinds.

As editorial directors, however, Shawna and I are inclusivists, and we must be. We can't rely on all readers having our tastes exactly, and if we insisted on catering only to those who did, we would narrow the basis of support of the magazine to less than might suffice to support it. Rather than pleasing x people 100 percent of the time, it would be safer to please $10x$ people 90 percent of the time.

Therefore, if we were to come across a good and thought-provoking story that might be considered a fantasy by the exclusivists, we would be strongly tempted to publish it—especially if we were short on good thought-provoking "straight" science-fiction.

(At this point, I might point

out—and not for the first time—that we are at the mercy of authors and of circumstance in designing the makeup of the magazine. Readers sometimes seem to have the notion that we are, for some mysterious reason of our own, deliberately filling the magazine with novelettes and skimping on the short stories, or having too many downbeat stories in one particular issue, or too many first-person stories. The trouble is that if we have a several-months stretch in which very few light-hearted—or third-person—or very brief—stories reach us that are good, we can't avoid running short on them. We can't print bad stories just because we need one that's funny, or short, or whatever. This also goes for readers who berate us at times for not including stories by so-and-so in the magazine. We would love to include such stories, but the author in question has to send them to us first. *Please keep that in mind.*)

But back to fantasy. Fantasy is from the Greek "phantasia," which refers to the faculty of imagination. The word is sometimes spelled "phantasy" in homage to Greek, but I find that foolish. (In fact, I find the Greek "ph" foolish altogether and think it would be delightful if we spoke of fotografs and filofosy, as the Italians do.) A contracted form of fantasy, with a similar meaning, is "fancy."

In a very broad sense, all fiction (and a great deal of non-fiction) is fantasy, in that it is drawn from the imagination. In our group, however, we give the word a special meaning. It is not the plot of a story that makes it a fantasy, however imaginative that plot might be. It is the background against which the plot is played out that counts.

The plot of "Nicholas Nickleby," for instance, is entirely imaginative. The characters and events existed entirely in Charles Dickens' imagination but the background is the England of the 1830s exactly as it was (allowing for a bit of amiable, and in some cases, unamiable satire). This is realistic fiction. (We can even use the term where the background is made artificially pretty. Surely, the cowboys of real life must have been pretty dirty and smelly, but you'd never think it to look at Gene Autry or Randolph Scott.)

If, on the other hand, the background does not describe any actual background as it is (or once was) then we have "imaginative fiction." Science fiction and fantasy are each an example of imaginative fiction.

If the non-existent background is one that might conceivably exist someday, given appropriate changes in the level of science and technology, or given certain assumptions that

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do not conflict with science and technology as we know it today, then we have science fiction.

If the non-existent background cannot ever exist no matter what *reasonable* changes or assumptions we postulate, then it is fantasy.

To give specific examples, *The Foundation Series* is science fiction, and *The Lord of the Rings* is fantasy. To be more general about it, spaceships and robots are science fiction, while elves and magic are fantasy.

But there are all kinds of fantasy. There is "heroic fantasy" in which the characters are larger than life. In this case, the outsize nature of the characters may be so enormous as to verge on the grotesque, as in the case of Superman or the other superheroes; or may be so human in many ways that we find ourselves accepting them as real, as in the case of the elves and hobbits of Tolkien's masterpiece. The so-called "sword and sorcery" tale, of which Robert E. Howard's *Conan* saga is the progenitor, is a subdivision of this.

There is "legendary fantasy," which deliberately mimics the myth-making activities of an earlier age. We can have modern retellings of the Trojan War, or the voyage of the Argonauts, or the saga of the Ring of the Nibelungen, or of King Arthur and his Knights of the Round Table. A marvelous recent ex-

ample of this last is Marion Zimmer Bradley's *The Mists of Avalon*.

There is "children's fantasy," of which the well-known "fairy tales" are the best example, though these were definitely adult folk tales to begin with. Modern examples can stretch from the inspired madness of Lewis Carroll's *Alice in Wonderland* to the realism of Hugh Lofting's *Dr. Dolittle* tales (so realistic we almost forget that animals which talk and think in human fashion are actually fantasy).

There is "horror fantasy" in which tales of ghosts and malign beings such as devils and ghouls and monsters are used to thrill and frighten us. The motion pictures are rich in this type, from the satisfying greatness of *King Kong* and *Frankenstein* to the good-natured foolishness of *Godzilla*.

And there is "satirical fantasy," such as the marvellous tales of John Collier (did you ever read "The Devil, George, and Rosie"?—and this, frankly, is my favorite type of fantasy.

There may be other types, and numerous subdivisions of each; in fact, you may have a different system of classification altogether. However, the salient fact is that fantasy is a very broad and heterogeneous field of literature, and that each variety can vary in quality from the very good to the very bad.



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In every case, the very good will tempt us. After all, fantasy, like science fiction, is imaginative literature and there are times when this courtship can excuse our being inclusivistic.

In fact, it doesn't take much to switch from fantasy to sci-

ence fiction, and it can be done easily enough if you are a skilled practitioner. I, myself, rarely write fantasy; but when I do, once in a while, I tend to write what I can only think of as Collier-influenced material.

I began writing my "George and Azazel" stories as unabashed fantasies, and my reason for wanting to do them was because the satirical element made possible elaborate overwriting and straight-faced slapstick. My science fiction is chemically free of such things, and I'm human enough to want to indulge now and then.

I sold two specimens to a competing magazine and the beautiful Shawna objected.

"But they're fantasies," I said, "and we almost never do fantasies."

Shawna said, "Well, then, make them science fiction."

And I did. Azazel is no longer the demon he was at the start; he is now an extraterrestrial creature. Earlier I had assumed he was brought to Earth and into George's control by means of some magical spell—but I had never described it. I still don't, but you are free to suppose that he is pulled through a space-warp.

What he does is no longer outright magic. I manage to describe it in terms of rationalistic (if imaginary) science. The result is science fiction, even if not of a very "hard" nature.

Now some of you may find George and Azazel stories too nearly "fantasy" for your tastes, but I will continue to write them and hope that Shawna will buy one or two of them now and then, because I love them. And someday, when I have written enough of them, I will collect them into a book. ●

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Sleepwalks thru our cells
Tiny as ants marching upon stones

While recombinant detectives born
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—Robert Frazier



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LETTERS

Dear Isaac,

It's not important, but I can't help wishing you had not dignified that wretched piece in *Harper's* by even so much as your editorial "Shrugging It Off." The person responsible was being a literary critic—which is a very different breed from useful reviewers such as Baird Searles, or the occasional writer such as A. J. Budrys who comments intelligently on the work of his colleagues.

The best policy for all real writers to follow with regard to critics occurs in *The Jungle Books*: "... we do not notice them even when they throw nuts and filth on our heads."

Best,

Poul Anderson
Orindas, CA

I see your point, Poul, but it did make me see red, and when several readers began to write indignant letters, I could no longer resist.

—Isaac Asimov

Dear Shawna:

I enjoyed Augustine Funnell's Viewpoint article in the August, '83 *IASfm*. What a crazy idea—using money gleaned from the streets while walking to fund the space program. It's almost as crazy as let-

ting politicians set the budget. I was all set to dismiss the whole thing as a lighthearted (but compelling) exercise in speculation when I went for a walk and immediately found a five-dollar bill (\$6.41 Canadian). Crazy idea? You wouldn't happen to have that NASA address, would you?

Truly,

Jerry Oltion
Cody, WY

Never sell science fiction short. When I was young, finding a penny in the street wasn't uncommon and meant you could buy a penny Hershey bar. Nowadays those same Hershey bars are forty cents. What about an SF story about a guy who buys Hershey bars in 1934 and sells them in 1984? A time machine would pay for itself in a year or less.

—Isaac Asimov

Dear Dr. Asimov & Ms. McCarthy:

I just picked up the August issue of the magazine, and in looking through it, was immediately struck by one thing: Why the sudden fascination in the artwork for the issue with eyes?

The cover shows a pair of compelling eyes floating among clouds above a drowning Statue of Liberty. The inside illustration for the

cover story, by a different artist, shows those same compelling eyes in a small boy's face.

Another story, "Memory," is illustrated by another compelling pair of eyes in a female face floating above a female figure in a futuristic hospital bed.

For "Scenes From the Country of the Blind," one large eye is floating in the sky above a slightly Tudor-style building surrounded by some kind of shrubbery.

The illustration for "The Orchard" shows a pair of somewhat sinister-appearing eyes superimposed on a Rorschach blot design of trees and shrubs enclosed in what could either be the trunk of a tree or the cone of a volcano in front of a background of stars.

By this time, the reader is so sensitized to the fact that eyes are the focal point of the majority of the illustrations that the fact that the eyes on the female figure for "Sleepwalker" are closed only makes them more of a focal point than ever.

Then, to complete the variations on the theme of eyes, we are faced (excuse the pun) with a picture of an underwater skull with large black eye sockets to depict "The Catch."

I am forced to seriously consider the possibility that the professional science fiction artist's monthly magazine must have done a recent lesson on drawing eyes!

Either that or whoever is in charge of continuity at the magazine fell asleep at the switch.

Individually, the drawings are meritorious, it's just that that many eyes in one issue of the magazine is a bit much.

I have enjoyed almost every issue of your magazine since its inception, but I have not subscribed since the first year. I live in a small town out in the boonies of Indiana, which said town has very few shopping facilities. However, there is an outlet for a chain paperback bookstore here, which I could not live without. Therefore, in order to encourage the local merchant, I decided some years ago that rather than subscribe, I would purchase all my magazines and books locally. In case you are interested, said bookstore receives two copies of your magazine each month, and the other copy usually remains unsold. I live in fear that they will cease to carry it, but my conscience and my limited budget do not permit me to purchase two copies each month.

So, if there is another science fiction reader in Huntington, Indiana, *please* rush right down to Readmore Bookstore and snap up that other copy!

Thanks again for a very enjoyable magazine.

Futuristically yours,

(Mrs.) Lynn H. Barkema
Huntington, IN

I suspect one could go through each issue and, if one were ingenious enough, find a monomaniac aspect. I am tempted to set this up as a contest, but I quail at the thought of checking all the entries to see if they are valid.

—Isaac Asimov

Dear Shawna,

I've just finished reading the last six issues, which for several rea-

sons I didn't read when they arrived. I think you're doing a grand job. Thank you, thank you, for Joanna Russ and James Tiptree, Jr.!! Also, thanks for the fine stories by women authors (i.e. Willis, Van Scyoc, etc.).

Each issue seemed fresh, varied, well-written, and great reading. I'm sorry I ran out of the saved-up issues.

In regard to Ted Corley's letter (August '83), I am suspicious of the use of "species" because his letter seems otherwise so sensitive and thoughtful. If he didn't plant the word to incite comment, I am truly discouraged, that an articulate and apparently well-intentioned man could make such an incredible statement. Perhaps we are a separate species (see Margot Sims, *On the Necessity of Bestializing the Human Female*, South End Press, Boston, 1982), and proof that intelligent life does exist somewhere in the universe other than in *man*.

Related to the above, I would like to comment on an unfortunate tendency of some authors to introduce female characters as "girls" and then to have the leading male have sex with her. Intercourse with girls is against the law nearly everywhere in the United States. Sexually mature human females are called "women." Steve Perry ("Darts," March '83) does give the young woman's age as seventeen, but calls her "girl" and develops a wonderful story around their love. Perhaps the characters' involvement includes girl/woman confusion purposely, but it seemed more an element of neglect. If he moves from seeing her as girl to woman (instead of both, somehow inter-

changeably) it could have been clearer. In "The Eternity Wave" (May '83) by Scott Elliot Marbach I found the confusion much more of a problem. Julie, a "short black girl" is introduced on p. 134. Not until p. 142 does her husband get mentioned, and I found that a jolt.

Reading science fiction seems to require accepting whatever world the author chooses to create, but it needs to be consistent and believable. Sure, there could be a story in which real girl-children were sexually active, had husbands, and so on, but I wish authors would be more careful about interchanging girls with women.

A young man I spoke with once said that to him, girls his age would probably stay girls. Maybe it would be fair to suggest that at whatever age boys become men, girls become women. . . . Tossing the issue off as semantic quibbling doesn't solve the problem. It's important to women, girls growing into womanhood, and to boys and men. It is also important to clear writing.

Thank you for inviting reader feedback.

Susan W. Clark
East Nassau, NY

My own greatest breach of feminist principles (aside from treating women as sex objects, something I have despaired of ever changing) is the careless use of "girl" when I mean "woman." But then, to be perfectly frank, I still refer to "boys" as well, and frequently say "my boy," because I think "my man" is just as condescending and comes less naturally to me. Which reminds me that "man" and "woman" have been

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pejorative terms used by "gentlemen" and "ladies" for the lower classes. That may be why it's hard to make use of them.

—Isaac Asimov

Dear Shawna,

You're doing a good job running *IAsfm*, but please—please stop smoking. If you don't, I'm going to drop my subscription to the magazine. . . . In about 50 years.

Charles Wilson
Miami, OK

Oh, boy, am I on your side. Every time I walk stealthily into Shawna's office unannounced, she has just lit up a cigarette. She stubs it out at once, knowing my prejudice in favor of breathing and against lung cancer. This costs her a pretty penny.

—Isaac Asimov

Dear Ms. McCarthy,

I had thought that if I would ever write to *IAsfm* it would be to Baird Searles (he does have such a nice name) but, while I tend to agree with him in general about the books he reviews, I never had such a strong reaction (either positive or negative) that I felt it would deserve a fan letter. So (sorry, Mr. Searles), this is not addressed to him.

What does drive me to write is the controversy over the content of the magazine. Unlike others, I have no strange aversion to variety. An occasional fantasy (a Lord Darcy story by Randall Garrett would be a welcome addition) or romance (as in "Romance of the Equator") does not lead me to fits of rage. Even

crossword puzzles and Martin Gardner brain teasers must please somebody. So I live and let live. One thing I have missed lately (since March 1982, in fact, unless one slipped by me) is the series "Adventures in Unhistory" by Avram Davidson. Although his fiction ("Peregrine Perplexed," in particular) has drawn fire from time to time, I have yet to hear a single complaint on his historical musings. The dry spell has been longer than a year. Can't anyone get Professor Davidson to produce a new one?

With this one exception, I must add my vote to express confidence in the present editorial staff. I like what I get each month. Thank you.

Baird Swanson
Pine Island, MN

The trouble is Avram isn't sending them to us even though I think he is still writing them. I am sorry, but these things happen.

—Isaac Asimov

Dear Viewpoint (May Issue),

I would like to applaud Pamela Sargent's article on bylines. I was one page into it and had reached the same conclusion before she even mentioned it. There have been many writers who have followed author's outlines after their deaths but they never could really match the styles. If authors have the ability to chose their "heirs" their egos would not allow a sub-quality writer to fill their shoes.

I am a 24-year-old waitress with an inherited affliction for all forms of fantasy and science fiction which I read constantly. Of course, my

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monthly visits to the bookstore have created a credit line that matches that of a "bookie" (slight pun). So because of this I feel qualified to say bravo to Ms. Sargent for a terrific idea. I would also like to suggest that this article be sent to all the publishing houses for a reaction. Tell me, what does the Good Doctor think of this idea himself, since his name happened to appear in the article as one of the famed authors?

Fancifully yours,

Harriet Harvey
Ridgefield Park, NJ

Actually, I didn't like the idea and would have written an editorial dissent, but I suspected that Pamela wasn't really all that serious. Certainly, it's an interesting idea if, in my opinion, unfeasible.

—Isaac Asimov

Dear Dr. A.,

In regards to your editorial in the August issue: Perhaps I'm wrong, but it seems to me that "serious" fiction, the kind of stuff that Harper's magazine considers respectable, is facing a dilemma. The fact is that any story that is set in the present has to mention things that not too long ago were purely science fiction. Any story that does not mention computers, video games, lasers, and electronic home entertainment systems is already out of date. Soon a story set in the present will have to mention robots, spaceflight, holography, and who knows what else. The purveyors of "serious" fiction are finding themselves in a situation where life is becoming science fiction.

Already a lot of "serious" fiction is set, not in the present, but in the recent past. The '30s and '40s are very popular, or whenever a particular author was young. Their idea of the present is actually the past. So the people who sneer at science fiction are actually fighting a holding action against it. What they're really fighting is the world itself, and the rapid acceleration of technology. They're trying to save the safe, unchanging past, because they are afraid of the future.

Robin Reed
Chicago, IL

An interesting point. I have never used the phrase "the science-fictionalization of the world" which is implicit in your letter. Maybe I ought to try to.

—Isaac Asimov

Dear Ms. McCarthy (and the Good Doctor, also),

After buying and reading faithfully every issue of *Asimov's* since the first issue, after driving my family crazy for many years buying and accumulating more science fiction books than a four-story house had room for, after passing on the good word about science fiction to hundreds of high school students for years—I am finally sitting here to write my first fan letter. And about time, too!

First, compliments on the continuing excellent quality of the magazine. I may not like everything that I have read in *Asimov's*, but most of it has given me many hours of enjoyment, entertainment, and ideas to think about. I prefer fiction to fact articles and

When power is cheap so is everything else. That's why when Amadeus Amalfi invented an inexpensive controlled fusion device it was quickly followed by an avalanche of goods and services until at last everyone on earth had enough, and then more than enough. And the avalanche continued...until there was no room for man.

A WORLD RUINED BY TOO MUCH OF EVERYTHING

Midas World



By
Frederik Pohl

PUB. DATE: FEB 1984
PAGES: 320 pp
PRICE: \$3.50

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interviews, but am aware that there must be a place for all sorts of tastes and am perfectly willing to concede to others their choices as long as I get a good healthy dose of mine every month.

Secondly, I just finished reading the *Letters* section in the August issue and would like to beg the Good Doctor to feel free to include any stories of his in this magazine anytime he has the time and inclination to do so. An issue with a story by him is always appreciated.

Thirdly, your editorship, Ms. McCarthy, has kept the magazine to its previously high standard. Many more years to you!

I thought I would pass on to you some personal experiences I had this past year concerning science fiction readers. I teach English and history at our local high school, and for years have used science fiction stories to illustrate points or spur interest in the classroom. I have also loaned many books from my personal "accumulation" to youngsters. This last year I took my entire collection of books and magazines to school (with the exception of this magazine) and made them available to anyone in the high school who wished to borrow them. The most popular author by far was Dr. Asimov! Anything with his name on it had a long waiting list of names. Next in line were Arthur C. Clarke, Robert Heinlein, Anne McCaffrey, Fritz Leiber, Ray Bradbury and Andre Norton. There were about fifty regular borrowers and they were prompt in returning as well as caring for the books they borrowed. I spent many conference periods talking about science fiction to those kids and couldn't have

enjoyed myself more. Their average physical age was 15, but their mental age (with the grades to prove it) was much higher. My books are still in my room at school waiting for the new school year to start. I just hope I have as many readers next year as I had this last one. I spent many days teaching my own classes while my book corner had kids quietly and happily browsing through the 2000-plus books I own.

It did somewhat surprise me to find that most of my "borrowers" preferred "hard" science fiction to fantasy. There were a few who would read only "sword and sorcery" stories, but the majority were open to new authors. I introduced many to Jack Williamson, Bob Shaw, Fred Saberhagen, and James Gunn—and they came back for more. I threw Ursula LeGuin and Harlan Ellison at them—and they demanded more. I had boys reading the Hoyles and Robert Silverberg and Robert Sheckley at the same time. The one real failure I had was in getting anyone to read Ron Goulart and Mack Reynolds. I don't know why unless teenagers' sense of humor is different from adults, but those books were politely returned and gathered dust the rest of the year.

Anyway, it was a good year for me and a good year for my science fiction readers and I hope it was a good year for this magazine. My heartfelt thanks for the many years of enjoyment Dr. Asimov's books and stories have brought to me and for the same thing this magazine is now doing.

Wanna L. Hite
Gwinn, MI

After reading your letter, Shawna remarked that she wished she had had a teacher like that. I think all of us, without exception, would wish that.

—Isaac Asimov

Dear Editors:

I applaud any effort to increase the scientific and/or technological literacy of the general population. Mr. Martin Gardner's article, "Viewpoint: Great Moments in Pseudoscience" (July) was greatly appreciated. He is wrong in his dating of *Fate*. The first issue was in 1948 not 1946. Interest in the paranormal is not merely an American phenomenon. The interest is world-wide.

The problem is that the wonders of science and technology are so astonishing that it is not always easy to separate the true from the false and/or mistaken. Let us recall such triumphs of establishment-science as polywater, Piltdown Man, the magneto-optic method, etc. Even people with technical training don't always believe "correctly," as witness Tesla who didn't believe in the atomic theory, or those able German scientists who did support Nazism or those Russians who supported Lysenko. Many intelligent people are ignorant of matters outside their expertise (and even at times within their expertise, alas). Much of this is due to the sheer complexity and size of our culture.

Even "science fiction" is now used to label stories that are complete fantasies dealing with: rings, jewels, words, swords, etc. of: power, wealth, darkness, evil, light, etc., etc. As long as there is money to

make from such things, such things will be sold. The power of the marketplace is mighty and few there are who resist it.

I wish Mr. Gardner and his friends success, but it is like trying to empty the ocean.

Edward Wood
1241 Crestview Dr.
Hurst, TX 76053

It's a matter of living with yourself, Ed. We may never empty the ocean, but the attempt lends us a feeling of dignity. And who knows how much worse it would be if rational men despaired and did nothing.

—Isaac Asimov

Dear Ms. McCarthy, et al:

Hooray for Martin Gardner and his article on pseudoscience! Although I'm often bemused by his math problems (algebra and other higher forms of mathematics are resigned to the fact that we just don't get along), I get tired of the long list of mystics, magicians, and other malaised types who are believed (and taken to the heart) by the Great Unwashed. Only one complaint: Mr. Gardner wrote about the fakery involved in L. Ron Hubbard's dianetics, and yet you ran an ad for Hubbard's book on the subject! Surely you can accept more honest ads.

Sincerely yours,

Matthew E. Tabery
Executive Editor,
The Minnesotan Science
Fiction Reader
Golden Valley, MN

The temptation to run herd on the

ads and make each one match my own beliefs, for instance, is a strong one. That seems to run into problems of censorship, however, and freedom of the press. It's rather a dilemma for an idealist.

—Isaac Asimov

Dr. Asimov:

I must apologize for not having written sooner to express my enormous regard for the high-quality SF I continually find pressed in your thin volume. The occasion is rare when I do not read the magazine from cover to cover immediately upon receipt!

Your editorials usually hit the mark, too, no matter the topic, but "Unreasonable," in the June 1983 issue, seemed oddly intolerant. I recognize that celebrities such as yourself will forever have to contend with the insensitive and boorish segments of our population; however, don't you think that "Unreasonable" is in itself a bit unrea-

sonable? Time is indeed a precious, irreplaceable commodity. And the time of an admirer is every bit as valuable—to him/her.

Please don't consider the above a gripe (a mere difference of opinion, perhaps), and don't let it overwhelm my intent . . . which is to say how much I look forward to my monthly *IAsfm*. (More stories by David Brin, please!)

Sincerely,

S. D. Todd

FPO San Francisco CA

You miss my point. If two hundred people expect answers, I ask each to donate 20¢ and a minute of time. If they refuse, they expect someone at the magazine to donate \$40 and 3 1/3 hours of time. Thus, I really don't feel it's an "unreasonable" request.

And Shawna tells me we'll be seeing more from David Brin. In fact, our March issue will feature a sequel to "The Postman."

—Isaac Asimov



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GAMING

by Dana Lombardy

Lost Worlds by Nova Game Designs Inc. (Box 1178, Manchester, CT 06040) is Nova's first fantasy game. Unlike conventional games, this one consists of two books—one for each player—that show you what your opponent is doing. No paper, pencils, or dice are required. Instead, you employ straightforward tactics and a good dash of outguessing to beat your opponent's move.

The first two-book set in *Lost Worlds* represents two characters: a skeleton with scimitar and shield, and a man in chain-mail, with sword and shield. When playing, you select the book opposite from your character. If you're playing the human adventurer, you take the skeleton book; if you're playing the skeleton, you use the book showing the man.

Each book is 36 pages long, with 32 different illustrations of the man or the skeleton in a variety of poses: defending, charging, wounded, hitting, being hit, parrying, thrusting, etc.

Along with each illustration

are notes on points scored if you hit him, plus a code at the bottom of the page which you select from for a specific maneuver.

The maneuvers you may make are listed on a separate, color-coded card which is provided. The card also shows your character (which you can name), along with his height, body points, and any modifiers. There are seven basic maneuvers: down swing, side swing, thrust, fake, protected attack, shield block, jump, and four special maneuvers, such as kick.

In addition, there are eight long-range maneuvers you can do. Including variations on each maneuver, there are 31 different things you can do, such as high, low, or strong side swing. You may not be able to do all of them every turn, since a previous maneuver may put you out of position.

Several more books in the series have been published, and they're all interchangeable: you can fight anyone against anything in the series. *Lost Worlds* is highly recommended.

Alien Contact by Phoenix Enterprises Ltd. (Box 81192, Chamblee, GA 30366) is a more traditional style game, with a large, full-color space map mounted on a stiff board, 528 colorful die-cut playing pieces, 72 event cards, 6 player aid cards, a turn record card, and a short, 4-page rules folder.

After many years of costly and exhaustive warfare over the exploration and exploitation of uncharted star sectors on the game map, the six most powerful races (each represented by a player) negotiate an armistice. Now they compete in a more organized, but less destructive manner. While there is still combat, what's more important from a play standpoint are diplomacy and each race building higher levels of technology for its society.

Alien Contact has a unique, two-phase victory determination. The object is to accumulate the most resource points; but star systems that give you the most resource points also give you the fewest victory points. It's your total victory points that determine how many votes you have to elect a new Chancellor on the Council you and the other five players sit on.

Obviously, you have a dilemma: If you only go for the resource points of the highest-value star systems, you won't

gather enough victory points to determine who becomes the next Chancellor. This is complicated even further by the fact that each of the six players gets different points for the same star system; so there are a lot of factors to be weighed in your strategy.

All players start with Level 1 technology units: one pirate, one space station, five space ships, and five regular space marines.

During each turn, you move your pirates first, then the remaining forces you have. In the process, you resolve combat if two or more opposing races have units in the same star system, then draw an event card which may show meteor showers, magnetic storms, revolts, or other negative forces to spice up the game with random, uncontrollable activities.

You can then try diplomacy with the other players, such as alliances or transfers of resource points. Finally, you collect resource points for the star systems you control, and build more, and higher tech level, units.

The strategy options available are complicated, although actual play is simple. As a result, *Alien Contact* will take some time to master. For those of you interested in a strategic, diplomacy and combat-style game, it's worth the effort. ●

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MARTIN GARDNER

PRECOGNITION AND THE MYSTIC 7



This month we will depart from our usual format to describe some remarkable number tricks that will amaze you if you try them on any small calculator. Before reading further, obtain a pocket or desk calculator and take the tricks as they come. All of them involve the number 7, the digit that ancient and medieval mystics believed to be unusually rich in magical properties. Although you will be asked to select certain numbers at random in your mind, I will exercise my paranormal powers of precognition and try to predict, in each case, the exact outcome of your calculations.

As a starter, put into the readout the mysterious number 15873. Select any digit from 1 through 9 and multiply 15873 by that digit. Now multiply the product by 7. The readout will show your chosen digit repeated six times.

Why does it work? Because 15873 times 7 is 111111, and 111111 times any digit will naturally produce a number that is that digit repeated six times. To get a longer string of digits, multiply 12345679 (note that 8 is omitted) by any positive digit, then multiply by 9. This works because 12345679 times 9 is 111111111.

Let's try something not quite so easy to explain. Assuming you are older than 9, put your age in the readout. Multiply it by the magic number 1443, then multiply the result by 7. The surprising result: your age repeated three times!

This always works because 1443 times 7 is 10101. It is easy to

"MIND-CROGGLING"...

Harlan Ellison

Best SF Game
Games Day, London 1982

Best SF Game
Space Gamer Mag 1980, 1981

2nd Best Family Game
Games Day, London 1981

Ten Best Games Hon. Men.
Omni Mag 1980

Games 100 Best Games
Games Mag. 1980, 1981,
1982, 1983



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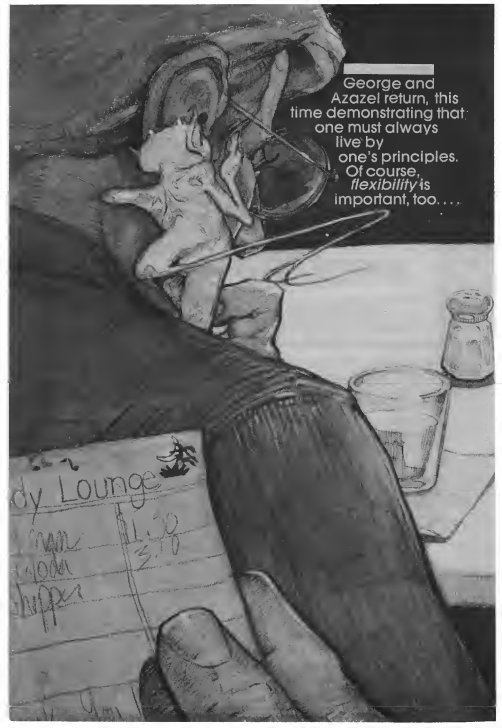
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see that any two-digit number multiplied by 10101 will produce a triple "stutter" of the two-digit number.

A trick closely related to the previous one starts by putting any three-digit number in the readout. Hit the same three keys in the same order so that the readout stutters. In other words, the readout contains a six-digit number of the form *ABCABC*, where *A*, *B* and *C* need not be different digits. Divide this by 13. There will be no remainder. Divide again by 11. Again no remainder! Now divide by 7 and take a look at the readout. It is your original three-digit number!

To understand why this works, multiply 7 by 11 and then by 13. The product is 1001. Obviously 1001 times any number *ABC* will give *ABCABC*. The trick simply reversed this process. *ABCABC* divided by 7, 11, and 13 (which is the same as dividing by 1001) must give *ABC*. It is easy to generalize to larger stuttering numbers. Do you see why a number of the form *ABCDABCD* becomes *ABCD* when divided by 137, then by 73?

For the next trick, put 999999 in the readout. Roll a die to get a number from 1 through 6. If you don't have a die handy, just roll an imaginary die and use whatever number comes up. Multiply 999999 by the randomly chosen digit, then divide the result by 7. Now turn to page 41 to see what I predicted, months ago, about the final outcome.



George and
Azazel return, this
time demonstrating that
one must always
live by
one's principles.
Of course,
flexibility is
important, too. . .

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supper	



A MATTER OF PRINCIPLE

by Isaac Asimov

art: John Pierard

George stared sombrely into his glass, which contained my drink (in the sense that I would surely be paying for it) and said, "It is only a matter of principle that makes me a poor man today."

He then fetched a huge sigh up from the region of his umbilicus and said, "In mentioning 'principle' I must, of course, apologize for using a term of which you are not cognizant, except perhaps as a homonym for the title of an official at the grade school from which you nearly graduated. As a matter of fact, I am myself a man of principle."

"Really?" I said. "I presume you have been granted this character trait by Azazel only two minutes ago, for you have never exhibited it, to anyone's knowledge, before then."

George looked at me in an aggrieved manner. Azazel is the two-centimeter extraterrestrial that is so advanced—according to George—that its technological power seems almost magical to ordinary Earth-people. He said, "I cannot imagine where you have heard of Azazel."

"It's a complete mystery to me, too," I said, agreeably, "or would be if it weren't your sole subject of conversation these days."

"Don't be ridiculous," said George. "I never mention him."

Gottlieb Jones [said George] was a man of principle, too. You might think that an utter impossibility considering that his occupation was that of an advertising copywriter, but he rose superior to his vile calling with an ardor it was most attractive to watch.

Many times he would say to me, over a friendly hamburger and dish of french-fries, "George, words cannot describe the horror of the job I have, or the despair that fills me at the thought that I must find persuasive ways of selling products that every instinct tells me human beings are better off without. Only yesterday, I had to help sell a new variety of insect repellent which, by test, has mosquitos emitting supersonic screams of delight as they flock to it from miles around. 'Don't be mosquito-bait,' my slogan reads. 'Use Skeeter-Hate.' "

"Skeeter-hate?" I repeated, shuddering strongly.

Gottlieb covered his eyes with one hand. I'm sure he would have used both, had he not been shoveling french-fries into his mouth with the other. "I live with this shame, George, and sooner or later, I must leave the job. It violates my principles of business ethics *and* of writing ideals, and I am a man of principle."

I said, courteously, "It *does* bring you thirty thousand a year,

Gottlieb, and you *do* have a young and beautiful wife plus an infant child to support."

"Money!" said Gottlieb, violently, "is dross. It is the worthless bribe for which a man sells his soul. I repudiate it, George; I cast it from me with scorn; I will have nothing to do with it."

"But, Gottlieb, surely you are doing no such thing. You accept your salary, do you not?" I will admit that for an uncomfortable moment I thought of a penniless Gottlieb and the number of lunches his virtue would make impossible for him to buy the two of us.

"Well, yes, I do. —My dear wife, Marilyn, has a disconcerting way of introducing her household allowance into conversations of an otherwise purely intellectual sort, to say nothing of her idle references to various purchases she foolishly makes at grocery stores and clothing shops. This does have a constraining influence on my plans of action. As for young Gottlieb, Jr., who is now nearly six months old, he is not quite ready to understand the utter unimportance of money—though I will do him the justice of admitting that he has never yet actually asked me for any."

He sighed, and I sighed with him. I had frequently heard of the uncooperative nature of wives and children where finances are concerned, and it is, of course, the chief reason I have remained uncommitted in this respect through a long lifetime, during which my unearthly charm has caused me to be pursued ardently by a variety of beautiful women.

Gottlieb Jones unwittingly interrupted several pleasant reminiscences in which I was harmlessly indulging myself by saying, "Do you know my secret dream, George?"

And, for a moment, he had so lubricious a gleam in his eyes that I started in mild alarm, thinking he had somehow read my mind.

He added, however, "It is my dream to be a novelist, to write trenchant exposés of the quivering depths of the human soul, to hold up before a humanity, that is at once shuddering and delighted, the glorious complexities of the human condition, to write my name in large indelible letters across the face of classic literature and to march down the generations in the glorious company of men and women such as Aeschylus, Shakespeare, and Ellison."

We had finished our meal, and I waited tensely for the check, judging to a nicety the moment when I would allow my attention to be distracted. The waiter, weighing the matter with the keen perception inseparable from his profession, handed it to Gottlieb.

I relaxed, and said, "Consider, my dear Gottlieb, the appalling consequences that might follow. I have read but recently, in a highly reliable newspaper that a gentleman near me happened to be holding, that there are 35,000 published novelists in the United States; that of these but 700 make a living of their craft, and that 50—only 50, my friend—are rich. In comparison with this, your present salary—"

"Bah," said Gottlieb. "It is a matter of little moment to me whether I make money or not, so that I gain immortality and bestow a priceless gift of insight and understanding to all future generations. I could easily bear the discomfort of having Marilyn take a job as waitress or bus-driver, or some other undemanding position. I am quite certain she would, or should, consider it a privilege to work by day and care for Gottlieb, Jr., by night so that my artistry might have full play. Only—" He paused.

"Only?" I said, encouragingly.

"Well, I don't know why it is, George," he said, a rather petulant note entering his voice, "but there is a trifle that stands in the way. I don't seem to be able quite to do it. My brain teems with ideas of tremendous moment. Scenes, scraps of dialogue, situations of extraordinary vitality tumble through my mind constantly. It is only the very unimportant matter of actually placing it all into appropriate words that seems to elude me. It must be a minor problem, for every incompetent scrivener, such as that friend of yours with the peculiar name, seems to be at no loss for a way of turning out books by the hundred, and yet I cannot quite grasp the trick."

(He surely must have meant you, my dear fellow, since the phrase 'incompetent scrivener' seems so apt. I would have defended you, of course, but I felt that that would be a losing proposition.)

"Surely," I said, "you can't have tried hard enough."

"Have I not? I have hundreds of sheets of paper, each containing the first paragraph of a marvelous novel—the first paragraph and no more. Hundreds of different first paragraphs for hundreds of different novels. It is the second paragraph that, in every case, is the stumbling block."

A brilliant idea struck me, but I was not surprised. My mind welters constantly in brilliant ideas.

"Gottlieb," I said, "I can solve this problem for you. I can make you a novelist. I can make you rich."

He looked at me with an unlovely gleam of skepticism. "You can?" he said, with a most unflattering emphasis on the pronoun.

We had risen and left the restaurant. I noted that Gottlieb had forgotten to leave a tip, but felt it to be scarcely politic for me to mention the fact as he might have then made the appalling suggestion that I take care of it.

"My friend," I said. "I have the secret of the second paragraph, and therefore can make you rich and famous."

"Hah! What is the secret?"

I said, delicately (and here we come to the brilliant idea that had struck me), "Gottlieb, a laborer is worth of his hire."

Gottlieb laughed shortly. "My confidence in you is such, George, that I have no fear in stating that if you can make me a rich and famous novelist, you can have half my earnings—after business expenses are deducted, of course."

I said, even more delicately, "I know you to be a man of principle, Gottlieb, so that your bare word will hold you to an agreement as though you were bound with hoops of the finest alloy-steel, but just for a laugh—ha, ha—would you be willing to put that statement into written form and have it signed and—just to make the laugh even heartier—ha, ha—notarized? We can each have a copy."

That little transaction took up only half an hour of time, since it involved only a notary public who was also a typist and a friend of mine.

I put my copy of the precious paper carefully into my wallet and said, "I cannot give you the secret immediately, but as soon as I have arranged matters, I will let you know. You can then try to write a novel and you will find that you will have no trouble with the second paragraph—or the two thousand and second. Of course, you will not owe me anything until the first advance, a very large one, I'll be bound, starts coming in."

"You'd better believe it," said Gottlieb, nastily.

I went through the ritual that called up Azazel that very evening. That is only the name I have given him, you understand, for I resolutely refuse to use the name *he* uses. That, when written down, is ten times longer than he is himself.

He is only two centimeters tall, and is a personage of no account on his own world. That is the only reason he is willing to help me out in various trivial ways. It makes him feel important.

Of course, I can never persuade him to do anything that will serve, in some direct fashion, to make me rich. The little creature insists that this would be an unacceptable commercialization of his art. Nor does he seem convinced by my assurance that any-

thing he will do for me will be used in an utterly selfless way for the good of the world. When I said that, he made a queer sound, the significance of which I did not understand, and which he said he had learned from a native of the Bronx.

It was for that reason that I did not explain the nature of my agreement with Gottlieb Jones. It would not be Azazel who would be making me rich. It would be Gottlieb who would be doing so after Azazel had made *him* rich—but I despaired of making Azazel understand the nice distinction involved.

Azazel was, as usual, irritated by having been called up. His tiny head was decorated with what looked like minute fronds of seaweed and it appeared from his somewhat incoherent account that he had been in the midst of an academic ceremony in which some honor or other was being conferred upon him. Being of no real account on his own world, as I said earlier, he had the tendency to attach far too much importance to such an event, and was bitter in his comments.

I shrugged it off. "You can, after all," I said, "take care of my trifling request and then return to the exact moment at which you left. No one will even know you were gone."

He grumbled a little but had to admit that I was right, so that the air in his immediate vicinity ceased crackling with miniature lightning.

"What do you want, then?" he demanded.

I explained.

Azazel said, "His profession is that of the communication of ideas, is that it? The translation of ideas into words, as in the case of your friend with the peculiar name?"

"That is it, but he wishes to do it with increased efficiency, and to please those he deals with so that he achieves much acclaim—and wealth, too, but he wants that only as tangible evidence of the acclaim, for he despises money in itself."

"I understand. We have word-smiths on our world, too, and one and all value only the acclaim and would not accept the smallest unit of currency were it not that they must have it as tangible evidence of the acclaim."

I laughed indulgently. "A foible of the profession. You and I are fortunate to be above such things."

"Well," said Azazel. "I can't be here for the rest of the year, can I, or I'll have trouble pinpointing the precise time of my return. Is this friend of yours within mental reach?"

We had trouble finding him, even though I pointed out the location of his advertising firm on a map and gave my usual

eloquent and accurate description of the man, but I don't want to bore you with irrelevant detail.

Gottlieb was eventually found and, after a brief study, Azazel said, "A peculiar mind of the type universal among your unpleasant species. Gummy, yet fragile. I see the word-smith circuit and it is knotted and bumpy, which makes it no surprise that he is having trouble. I can remove the obstructing bit but that could endanger the stability of his mind. I think not, if I am skillful enough, but there is always the chance of accident. Do you suppose he would be willing to take the risk?"

"Oh, undoubtedly!" I said. "He is intent on fame and on serving the world with his art. He wouldn't hesitate to take the risk at all."

"Yes, but you are a devoted friend of his, I gather. He may be blinded by his ambition and his desire to do good, but you may see more clearly. Are *you* willing to have him take the chance?"

"My only aim," I said, "is to bring him happiness. Go ahead, and hack away as carefully as you can, and if things go wrong—well, it will have been in a good cause." (And it was, of course, since if things went right, I would get half the financial consequences.)

And so the deed was done. Azazel made heavy weather about it, as he always did, and lay there panting for a while, and muttering something about unreasonable requests, but I told him to think of the happiness he was bringing millions of people and urged him to avoid the unendearing quality of self-love. Much improved by my edifying words, he left in order to see to the completion of whatever trifling honor had come his way.

It was about a week later that I sought out Gottlieb Jones. I had made no effort to see him sooner, for I felt it might take him some small period of time to adjust to his new brain. Besides, I preferred to wait and inquire about him indirectly just at first to see if he had been brain-damaged in any way in the process. If he had, I would have seen no point in the meeting. My loss—and his, too, I suppose—would make a meeting too poignant.

I heard nothing untoward about him and certainly he seemed quite normal when I met him coming out of the building that housed his firm. I noted at once the air of settled melancholy about him. I paid that little attention, for writers, I have long noticed, are prone to melancholy. It is something about the profession, I believe. The constant contact with editors, perhaps.

"Ah, George," he said, listlessly.

"Gottlieb," I said, "how good to see you. You are looking more handsome than ever." (Actually, like all writers, he is quite ugly, but one must be polite.) "Have you tried to write a novel lately?"

"No, I haven't." Then, as though, he had suddenly remembered, he said, "Why? Are you ready to give me that secret of yours concerning the second paragraph?"

I was delighted that he remembered, for that was another indication that his brain was as sharp as it had ever been.

I said, "But that's all done, my dear fellow. There was no need for me to explain anything; I have more subtle methods than that. You need merely go home and sit down at your typewriter and you will find yourself writing like an angel. Rest assured that your troubles are over and that novels will tumble smoothly out of your typewriter. Write two chapters and an outline of the rest, and I am absolutely certain that any publisher you show it to will scream with joy and make out a huge check, every cent of which will be half-yours."

"Hah!" snorted Gottlieb.

"My assurance," I said, placing my hand upon my heart, which, as you know, is large enough, in a figurative sense, to fill my entire thoracic cavity. "In fact, I feel it to be entirely safe for you to quit this job of yours in order that it might in no way contaminate the pure material that will now be emerging from your typewriter. You have but to try, Gottlieb, and you will agree that I have more than earned my half."

"You mean you want me to quit my job?"

"Exactly!"

"I can't do it."

"Certainly you can. Turn your back on this ignoble position. Spurn the stultifying task of commercial puffery."

"I tell you I can't quit. I've just been fired."

"Fired?"

"Yes. And with expressions of lack of admiration which were of a type that I have no intention of ever forgiving."

We turned to walk toward the small and inexpensive place where we usually dined. "What happened?" I said.

He told me, morosely, over a pastrami sandwich. He said, "I was writing copy for a room-freshener and I was overwhelmed by the enforced gentility of it all. It was all we could do to use the word 'odor.' Suddenly, I just wanted to speak my mind. If we were going to promote this damned garbage, why not do it right? So I put at the head of my finicky copy, *Shrink the Stink*, and at the

bottom, *Quench the Stench*, and then had it messengered over to the account without bothering to consult anybody.

"After it was messengered, though, I thought, 'Why not?' and sent a memo to my boss, who had a very loud and very instant apoplectic fit. He called me in and told me I was fired along with some very harsh words that I knew he had never learned at his mother's knee—unless she was a very unusual mother. So here I am, out of a job."

He looked up at me with a hostile scowl. "I suppose you'll tell me this is your doing."

I said, "Of course, it is. You did what you subconsciously knew was right. You deliberately had yourself fired so you could spend all your time at your true *art*. Gottlieb, my friend, go home now. Write your novel and make sure you get no less than \$100,000 advance. Since there will be no business expenses to speak of, except a few pennies for paper, you will not have to deduct anything and can keep \$50,000."

He said, "You're crazy."

"I am confident," I said, "and to prove it, I will pay for the lunch."

"You *are* crazy," he said, in an awed kind of voice, and actually left me to pay the bill, though he must have known that my offer was merely a rhetorical device.

I phoned him the next night. Ordinarily, I would have waited longer. I would not have wanted to rush him. Still, I now had a financial investment in him. Lunch had cost me eleven dollars, to say nothing of a quarter tip, and I was naturally restless. You can understand that.

"Gottfried," I said, "how is the novel going?"

"Fine," he said absently. "No problem. I knocked off twenty pages, and very good stuff, too."

Yet he sounded casual, as though it was something else on his mind. I said, "Why aren't you jumping for joy?"

"Over the novel? Don't be silly. Fineberg, Saltzberg and Rosenberg called."

"Your advertising . . . your ex-advertising firm?"

"Yes, Not all of them, of course; just Mr. Fineberg himself. He wants me back."

"I trust, Gottlieb, you told him exactly how far up—"

But Gottlieb interrupted me. "Apparently," he said, "the air-freshener account went wild over my copy. They wanted to use it and they wanted to commission a whole group of ads, for TV

as well as for the printed media, and they wanted only the writer of that first ad to organize the campaign. They said that what I had done had been bold and hard-hitting and that it perfectly suited the decade of the Eighties. They said they wanted to produce advertising that was unprecedently forceful and that for that they needed me. Naturally, I said I would consider it."

"That's a mistake, Gottfried."

"I ought to be able to hit them for a raise; a substantial one. I have not forgotten the cruel things Feinberg said when he kicked me out—some in Yiddish."

"Money is dross, Gottlieb."

"Of course, George, but I want to see how *much* dross is involved."

I wasn't very worried. I knew how the task of writing advertising copy grated on Gottlieb's sensitive soul, and I knew how attractive would be the ease with which he could write a novel. It was only necessary to wait and (to coin a phrase) let nature take its course

But then the air-freshener ads came out and they made an instant hit with the public. "Quench the stench" became a byword with the youth of America and each use was, willy-nilly, a plug for the product.

I imagine that you yourself remember that fad—but of course you do, for I understand rejection slips containing the phrase became *de rigeur* among the periodicals for which you try to write, and you have experienced it many times.

Other ads of the sort came out and were just as successful.

And, suddenly, I understood. Azazel had arranged to give Gottlieb the mind-set that made it possible for him to please the public with his writing, but, being small and of no account, he had been unable to fine-tune the mind in order to make the gift applicable to novels only. It might well be that Azazel did not even know what a novel was.

Well, did it matter?

I can't say that Gottlieb was exactly pleased when he came home and found me at his doorstep, but he was not so entirely lost to shame as to fail to invite me in. In fact, it was with some satisfaction that I realized he could not fail to invite me to dinner, though he sought (deliberately, I think) to destroy that pleasure by having me hold Gottlieb, Jr. for a lengthy period of time. It was a fearful experience.

Afterward, when we were alone in his dining room, I said, "And how much dross are you making, Gottfried?"

He looked at me reproachfully "Don't call it dross, George. It's disrespectful. Thirty thousand a year, I admit, is dross, but a hundred thousand a year, plus some very satisfactory perks, is financial status.

"What's more, I will soon establish my own firm and become a multi-millionaire, at which level money becomes virtue—or power, which is the same thing, of course. With my power, for instance, I will be able to drive Feinberg out of business. That will teach him to address me in terms that no gentleman should use to another. Do you happen to know what "schmendrick" means, by the way, George?"

I couldn't help him there. I am conversant with a number of languages, but Urdu is not one of them. I said, "Then you have grown rich."

"And plan to grow far richer."

"In that case, Gottlieb, may I point out that this happened only after I agreed to make you rich, at which time you, in turn, promised to give me half your earnings?"

Gottlieb's eyebrows drew together in a frown. "Did you? Did I?"

"Why, yes. I admit it is the sort of thing that is very easy to forget, but, fortunately, it was all placed in writing—in return for services rendered—signed—notarized—all that sort of thing. And I happen to have a photocopy of the agreement with me."

"Ah. May I see it then?"

"Certainly, but may I stress that it is merely a photocopy, so that if you should accidentally happen to tear it into little pieces in your eagerness to examine it closely, I will still have the original in my possession."

"A wise move, George, but do not fear. If all is as you say, not one jot nor tittle—not even a penny—will be withheld from you. I am a man of principle and I honor all agreements to the letter."

I gave him the photocopy and he studied it carefully. "Ah, yes," he said, "I do remember. Of course. There's only one little point—"

"What?" I asked.

"Well, here on this paper, it refers to my earnings as a novelist. I am not a novelist, George."

"You intended to be, and you can be one any time you sit down at the typewriter."

"But I no longer intend to be, George, and I do not expect to sit down at the typewriter."

"But great novels will mean immortal fame. What can your idiotic slogans bring you?"

"Lots and lots of money, George, plus a huge firm which I will

own, and which will employ many miserable copywriters whose very lives I will hold in the hollow of my hand. Did Tolstoi ever have that? Does del Rey?"

I couldn't believe it. "And after what I have done for you, you will refuse to give me one red cent, simply because of a single word in our solemn agreement?"

"Perhaps you should try your own hand at writing, George, because I couldn't have put the situation into words more clearly and succinctly myself. My principles hold me to the letter of the agreement, and I am a man of principle."

From that position he would not budge, and I realized it would do no good to bring up the matter of the eleven dollars I had spent for our last lunch together.

To say nothing of the quarter tip.

* * *

George rose and left, and did so in such a state of histrionic despair that I couldn't bring myself to suggest that he first pay his half of the drinks. I called for the bill and noted that it came to twenty-two dollars.

I admired George's careful arithmetic in paying himself back and felt constrained to leave a half-dollar tip. ●

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I certify that the statements made by me above are correct and complete.

KATHY TULLY-CESTARO
CIRCULATION MANAGER, SUBSCRIPTIONS

SOLUTION TO PRECOGNITION AND THE MYSTIC 7

I predict that the number in your readout contains a 5, a 1, and a 4. There are no 6s, 3s, or 9s. My precognition also tells me that the number contains a 7, an 8, and a 2.

This time I won't explain why it works. If you know some elementary number theory, maybe you can puzzle it out.

Here's a curious trick that requires the help of a friend. Put the year your friend was born into the readout, then add to it the year you were born. Now add the age your friend will be on the last day of 1984. Finally, add the age you will be on that same day. Whatever the final sum, divide it by 31, then add 649. You should see 777 in the readout.

This triplet of sevens was a popular symbol of divine perfection in medieval numerology. The molecule of insulin (7 letters), the first protein to be synthesized, has just 777 atoms. In New York City the Taft Hotel is at 777 Seventh Avenue. The three prime factors of 777 are 3, 7, and 37. About twenty years ago Alan Cyril Bates of Chicago, sent me the following limerick he had written about these digital coincidences:

777

Has 3 digits, each being 7.

Its factors are 3,

Also 7, you see,

And a prime write with 3 and a 7.

Now try this one. It involves the seven numbers of your telephone number. On a sheet of paper, scramble the digits of your phone number to make a different seven-digit number. Put the larger of the two numbers in your calculator, and subtract the smaller one. Now subtract 2 and divide the result by 9. There should be a decimal remainder. Turn to page 112 and I'll tell you more about that remainder.



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SENTIENCE AND THE SINGLE EXTRATERRESTRIAL

Dr. Rainbow is assistant professor of pharmacology at the University of Pennsylvania in Philadelphia. His research is on the chemistry of the brain. This is his third article for Viewpoint, the two previous ones being the "Feasibility of Mind-Transfer" (June '83 *Asfm*) and "Superpowers!" (Sept '83 *Asfm*). You would never know from reading his scientific articles that he's the same person that regularly flames-on for Viewpoint, and being an academic coward, he kind of hopes it stays that way.

by Tom Rainbow

art: Val Lakey Lindahn

As a science-fiction reader, you're acquainted with all sorts of sentient life, ranging from self-aware gluons to articulate, planet-sized Black Clouds. Given this postulated variety,

you must have wondered, as I have, why the only sentients you seem to know are the kind that you see at Sears?

I mean, just because you're a hominid, and most of your friends are hominids, does that mean that *everyone* is a

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hominid? Since there may be biological constraints on sentient life, and since we're the only sentient species that we know about, it is conceivable that the Universe is just one big Sears. Perhaps when we send our first starships to Epsilon Eridani, we'll be met by fat slobs in polyester bowling shirts.

Heck, if I were frozen in suspended animation for 400 years, and all I got were Sears-Special hominids for my troubles, I'd sell my starship to the Klingons! What happened to all the funny green guys, and the wonderful, furry, Wookies? There's no point in going all that way unless we know there's a good chance that the aliens will be *alien*, so let's discuss the plausible forms that sentient life can take, with the hope of avoiding a Universe that, phylogenetically speaking, strongly resembles Trenton, N.J.

Self-Awareness

Operationally, let us say that a sentient being is that



"Neurochemistry, like compact fusion reactions, is more efficient at higher temperatures. A constant, relatively high brain temperature allows neurons to burn less fuel for the amount of work they do. When we meet *Them* at last, it's likely that they'll be at least 20° hotter than ambient room temperature. If they have more temperature-resistant biochemistries, it's possible they'll be a *lot* hotter than us hominids, because of the resulting increase in physiological efficiency. (In other words, don't offer to shake hands.)"

which can hold a human-style conversation, verbal or non-verbal. This is the hoary "Turing Test" notion of sentience, named after the mathematician Alan Turing. Turing stated that a computer could be regarded as self-aware when it couldn't be distinguished from a human being in a teletype or terminal dialogue. Turing's definition corresponds to our inherent notion of what is sentient—I think you're self-aware because you act like me, who, of course, I *know* is self-aware. If we simply judge each other by appearance, and not by conversation, we could both merely be elaborate, Lucasfilmesque mechanical effects.

Not to offend any of you readers who might be cetaceans or some other lower vertebrate, but I would argue that only humans and their hominid ancestors have successfully passed the Turing Test. Behavioral studies that have been done on you dolphins, for example, indicate that you have all the brains of a bright dog. Are dogs self-

aware? I would say no, if our criterion is the Turing Test. The *sine qua non* of the Turing Test is the ability to use language. Outside of humans, only hominoids (apes) have been reported to use language. Does this mean that linguistic chimps have passed the Turing Test? That depends on how valid these studies are. Again, not to offend any non-hominids out there, but it has been suggested that all you guys may be doing is mimicking cues supplied by your trainers. Heck, similar things have been said about *me*, and I'm clearly sentient, though I once tried to get Carl Sagan to take my Turing Test for me. So, all you stupid little furry guys out there, don't take these criticisms personally! Uncle Tom really likes you, and does not want to take your brain out!

While, granted that the Turing Test is capable of an occasional false positive or negative, it's still pretty good for a definition of something as ephemeral as self-awareness. As a corollary of

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the Turing Test, we could even say that since human sentience results from a human brain, any entity that possesses a human-equivalent brain should be regarded as self-aware. As yet *another* corollary, we could say that a sufficient, and perhaps even necessary, condition for self-awareness is the possession of a human-equivalent brain. Remarkably, since many of us possess human-equivalent brains, this means that many of us are *self-aware*, perhaps even some of the people that you meet at Science-Fiction conventions!

Brain-Size and Self-Awareness

Now, what's so special about a human-equivalent brain? For one thing, it's more complicated than the brain of any other terrestrial species, having roughly 10^{10} neurons per 70 kg of body weight. This is essentially the largest number of neurons found in any mammalian brain, and is overwhelmingly the highest ratio of neurons to body

weight. While neuronal number is a good predictor of interspecies intelligence, a better statistic is the ratio of neuronal number to body weight. The larger the species, the greater its need will be for neurons to maintain its body. For example, an elephant, which is regarded by comparative psychologists as a reasonably intelligent animal, may have 8 billion neurons per 3500 kg of body weight. The more surface area your body has, the more housekeeping-type neurons you need to provide information about your body and to control its actions. Although an elephant may have only 20 percent fewer neurons than a human, most of its brain is devoted toward maintaining a body that's 500 fold larger. This does not leave a lot of neurons for luxuries like self-awareness.

Conversely, the smaller your body, the fewer neurons you need for its maintenance. Women, on the average, have smaller brains than men, but they also, on the average, have smaller bodies, so their

neuron to body weight ratio is the same as in men. Again, this reasoning leads to the somewhat startling conclusion that women must be *self-aware*. Heck, guys, if even *girls* can be self-aware, then there's hope for Giant Dill Pickles, and probably also for our home Atari games!

If women can be self-aware, can, say, *mice* be self-aware? A mouse brain weighs about 300 mg, of which 70 mg is cerebral cortex. A typical mouse weighs 30 g, so the ratio of cerebral cortex to body weight is .002. A human brain weighs 1.5 kg, almost all of which is cerebral cortex, so given a 70 kg average human body weight, the corresponding human ratio is .02, 10 times as large. Thus, mice would have to have brains roughly 10 times larger than they do now to be self-aware. I am assuming in this calculation that humans and mice have the same number of neurons per cm³ of cerebral cortex. This is probably not true, as humans seem to have a higher neuronal density than other mammals. The

elephants, mentioned above, actually have brains three times as heavy as a human brain, but the actual number of neurons is smaller because the density is less.

I also assumed that there is no minimum number of neurons that's required to produce self-awareness. Obviously, a one-neuron being is unlikely to be self-aware, regardless of how small its body is. There almost certainly is such a critical number, and it is unclear whether a 10 x normal mouse brain could attain this minimum. The smallest known hominid brain belongs to *Australopithecus*, estimated to have had a 500 g brain. If we scale the brain-to-body ratio of a mouse to this size, we get something that closely resembles a *Lucasfilm Ewok*, another stupid furry species that needs to have its brain removed by Uncle Tom and his scientist friends!

Physiological Requirements for Self-Awareness

Now, if mice, Ewoks, and

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even *girls* can be sentient, you would think that there's basically no limitation on what can be self-aware. This is not strictly true. As cell types go, neurons are metabolically demanding little creatures that require lots of special attention. The maintenance of a human-equivalent brain is an enormous problem that places real limitations on the kind of physiology its owner can possess. Although your brain is less than 2 percent of your total body weight, its metabolic functions comprise 20 to 40% of your total metabolism. By analogy, humans have compact fusion reactors in their skulls, while most other animals have golf-cart batteries. Our high ratio of brain to body weight limits the metabolic resources that can be used to maintain the rest of the body. It would not be surprising if humans were at the maximum ratio of brain to body weight that could be sustained by terrestrial metabolism. This would be the explanation for why terrestrial natural selection

hasn't produced animals any smarter than humans, as further increases in brain size would probably wither the poor species.

We have established so far that to be sentient, you need a human-equivalent brain, which among all its parts, may transfer information at a rate of 10^{17} bits/second, analogous to conveying in one second the information content of a hundred Libraries of Congress. (See "The Feasibility of Mind-transfer" in the June 83 *IASfm* for an explanation of this kind of calculation.) Regardless of whether a species uses terrestrial-type neurons or not, this high rate of information transfer will place large metabolic demands on its body. An adaptation that terrestrial mammals and birds have made for the sake of their large brains is *warm-bloodedness*. Neurochemistry, like compact fusion reactions, is more efficient at higher temperatures. A constant, relatively high brain temperature allows neurons to burn less fuel for the amount



"Given that it's impossible to rule out the existence of a hostile species like Niven's Kzinti, do you think it's a good idea to put directions to Earth on planetary probes that are going to leave the Solar System? Or perhaps worse, *transmit* directions at lightspeed via a huge radio-telescope, as has been suggested? Heck, we may as well be sending a giant EAT HERE sign."

of work they do. When we meet *Them* at long last, it's likely that they'll be at least 20° hotter than ambient room temperature. If they have more temperature-resistant biochemistries, it's possible they'll be a *lot* hotter than us hominids, because of the resulting increase in physiological efficiency. (In other words, don't offer to shake hands . . .)

What other physiological limitations would a sentient being encounter? Well, given that it has to have a complicated brain, whether terrestrial in design or not, that brain will require elaborate pre- or post-natal assembly. In humans, the development of a sentient brain occurs during a long, *in utero* gestation period, and during a relatively long post-natal period. Now, this does not mean that all sentients must be viviparous and send their neonates to kindergarten. You could imagine a proto-sentient that is hatched from an egg, with all the brains of a chicken, and then spends a year or so

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as a dumb animal while its brain develops to the sentient stage. This may be how Walt Disney, in his genius, envisioned the life-history of Donald Duck and the other inhabitants of Duckworld. I leave to the reader the general question of how the Beagle Boys became self-aware.

Given that we are dealing with evolved sentients, and not something the likes of Uncle Tom might create in his laboratory, another physiological requirement for self-awareness is *hands* or equivalent manipulative organs. A species is unlikely to evolve high intelligence unless it can use it for some adaptive purpose. With the hominids, it is clear that intelligence and manipulative/communicative abilities evolved in parallel, with each probably driving the evolution of the other at various times. The idea that sentience requires good effectors is discussed in Larry Niven's 1967 story "The Handicapped." The story concerned the discovery of a

sessile, handless animal, the Grog, which had a huge brain-to-body ratio, but was regarded as non-sentient because it lacked hands and senses—the Grog couldn't be sentient because it had no *use* for intelligence. However, the Grogs *were* self-aware. Their substitute for hands was telepathic hypnosis, which allowed them to use the hands and senses of other animals.

Plausible and Implausible Sentients

I would bet that the number of implausible sentients in science-fiction probably exceeds by a large number the actual number of sentients in our galaxy. Usually, these are species based on a simple extrapolation from a non-sentient terrestrial animal, a self-aware reptile-being or a sentient fish-person. Basically, these are cases where the science-fiction writer has ignored the basic requirements for a sentient being. For example, the standard SF reptile-person is unlikely to be self-aware

because reptiles, being poikilotherms, could not support an efficient cerebral metabolism. Now, warm-blooded reptiles, as some dinosaurs might have been, could make perfectly adequate sentient beings, if the writer gives them things like hands, and in general, acts like his species *really* exists, and that it *really* evolved. It's stories like this that make Uncle Tom and his scientist friends want to take the brains out of some science-fiction writers.

Soothing examples of plausible sentients do, however, exist. Turning again to Larry Niven's characters, there is the *Kzinti*, three-meter-tall, orange-furred bipeds that resemble big cats. They are aggressive carnivores, who would have used Man as a food animal, if Niven weren't kind enough to always let us win our interstellar wars.

Interestingly for us guys, only male Kzinti are sentient. Female Kzinti are dumb animals that are used only for breeding and probably for suckling.

Another well-known Niven alien is the *Pierson's Puppeteer*. Puppeteers in Niven's phrase resemble "a headless three-legged centaur, with two Cecil the Seasick Sea Serpent puppets stuck on its arms." The puppets are flat, brainless heads containing sense-organs and mouths that are used both for speaking and manipulation. The puppeteer's brain is contained under a bony hump in its back. Puppeteers are herbivores, and are as cowardly as the Kzinti are aggressive.

There is nothing about either the Kzinti or the Puppeteers that overtly violates our principles of sentience. Both adhere to the notion that sentient beings must have big brains, the appropriate physiology to support these brains and appropriate effectors for the brains to use. The idea that sentient extraterrestrials might be innately hostile *a la* the Kzinti is somewhat contrary to prevailing concepts of SETI (Search for Extraterrestrial Intelligence),

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which maintain that sentient aliens would at worst be indifferent, given that there are few rational incentives to launch an interstellar attack. But who says that they have to be *rational*? We're not, or at least not completely so. Maybe there are extraterrestrials, like the Kzinti, that have this regrettable, hard-wired tendency to *conquer* things, so when they pick up "I Love Lucy" re-runs on their radio-telescopes or better yet, retrieve Voyager-type spacecraft with funny naked hominid pictures on them, along with a diagram giving more or less the *exact* position of the Solar System, *they launch the fleet!!*, resulting in the subjugation of even an advanced terrestrial civilization.

Given that it's impossible to rule out the existence of a species like the Kzinti, do you think it's a good idea to put directions to Earth on planetary probes that are going to leave the Solar System? Or perhaps worse, *transmit* directions at

lightspeed via a huge Arecibo-type radio-telescope, as has been suggested? Heck, we may as well be sending a giant "EAT HERE" sign. The concept of Kzinti-like species will probably deter most sentient extraterrestrials from actively broadcasting their whereabouts, and might lead them to steps that would actually obscure their presence, such as camouflaging their interstellar communications as natural astrophysical phenomena. This probably means that SETI-type projects aren't going to work, since no intelligent species would want to advertise their existence. The money would probably be better spent on devising some form of planetary defense, in case any Kzinti-types have already detected us.

The plausibility of the herbivorous Puppeteers as sentients was criticized by the science fiction writer James Blish, on the grounds that a species doesn't have to be very intelligent to creep up on a blade of grass. Most hominoids are omnivores,

with a dietary emphasis on plants, and they're pretty smart, so what you eat is not necessarily the only determinant of your intelligence. The idea that carnivores are always going to be smarter than their herbivorous prey would mean that cobras would have to be more intelligent than field mice, which clearly isn't true. Predators are often dumber than their prey, as any science-fiction reader who has been mugged by his high school bully will attest. Puppeteers probably evolved intelligence to outwit predators: the smarter they were, the better they could escape. Science-fiction readers should be aware that in sufficient time, they, too, will evolve a mechanism to effectively cope with *their* traditional predators, perhaps utilizing something subtle like a built-in X-ray laser.

Now, returning to our original question, if it's plausible for sentience to arise in beings like Kzinti and Puppeteers, why is it that

terrestrial sentience is confined to the hominids? This probably resulted from somewhat random environmental influences on the evolutionary process. For example, the extinction of the dinosaurs, and hence, the rise of the mammals, has been attributed to an asteroid striking the Earth during the Cretaceous era (10^8 yrs B.P.). While, given the proximity of the Earth to the asteroid belt, it is inevitable that such collisions will happen, the timing can probably vary by as much as 10^8 years. If the hypothesized collision occurred 100 million years earlier, there wouldn't have been any mammals, and something else would have evolved to occupy the dinosaur's empty niche.

To give another example: primates, because of the exigencies of the ecological niche they occupied, evolved from ground-dwelling, nocturnal shrew-like animals into diurnal, arboreal species. The selective pressures of the arboreal environment led to increased vision and increased

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manipulative abilities. This, in turn, allowed increased intelligence to develop. When environmental pressures caused some primates to abandon the trees for life on the ground, the freeing of their hands from brachiation resulted in additional manipulative abilities, which fueled additional increases in intelligence, leading eventually to the evolution of the hominids. What if there had been a plague 30 million years ago which killed off the ground-dwelling rodents, and felines took to the trees to eat primates? Perhaps they would have adapted to the arboreal environment by developing hands, proceeded to decimate the primate population, and then left the trees to occupy essentially the same ecological niche as the hominids would have. The result would have been a sentient species a lot like the Kzinti, and incredible opportunities in the gourmet kitty-litter business.

Sentient Invertebrates

It grieves me somewhat to

think that the compound-eyed, tentacled monsters of my misspent, comic-booked youth would have died of anoxia faster than Superman could have peristalted his bowels. The problem with sentient invertebrates is the lack of lungs and a closed circulation. A human brain has roughly 10 billion neurons, 10^5 times the number of cells in the brain of even a smart invertebrate, such as a honeybee. Without a steady supply of oxygenated blood, an invertebrate can't support the metabolic demands of a large, sentient-capable brain. To have lungs and a closed circulatory system would require that the animal have an internal skeleton to support its viscera, thus making it into a *de facto* vertebrate.

While big-brained, big invertebrates appear unlikely, it might be possible to make a sentient organism from lots of *little* invertebrates. In a science-fiction story I once wrote, which evoked from the major SF editors the same sort of enthusiasm that they

normally reserved for a luncheon invitation from a Kzin, I proposed a sentient species that used a colonial brain composed of the nervous systems of $10^5 +$ mud-wasps. The "Star-Daubers," as I called my aliens, were colored-striped, eight-legged social insects with dual-mouths and long antennae extending from both the head and the abdomen. The Star-Daubers could connect together antenna-to-mouth to link their tiny bug-brains into a huge neural network, which could be made much smarter than a human brain because it could have an unlimited number of neurons. There were also separate castes of Star-Daubers, some specialized for different cognitive functions and some specialized for manipulation, including a slaver caste that could co-opt the brains of other animals, *a la* the Groggs, for elaborate tool-use.

Each Star-Dauber provided the metabolic support for only its own 100,000-neuron brain, thus avoiding the difficulties that a single invertebrate

"A sentient Universe would explain a lot of things. First of all, it would explain why such physical constants as the speed of light have the peculiar values that they have—when the Universe awoke in the first few 10^{-43} seconds after the Big Bang, it simply *decided* what physical constants it wanted. It's too bad that it liked funny numbers that are hard to remember."

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would have in sustaining a 10^{10} -cell sentient-capable nervous system. The Star-Dauber nerve net also solved the problem of how an egg-laying invertebrate could generate embryonically sufficient neural material to make a self-aware brain. There is no obvious reason why the Star-Dauber solution to invertebrate sentience wouldn't work, and given the probable diversity of life in the Universe, it is likely that Star-Dauber type, sentient social insects exist somewhere. Hopefully, not *too* nearby, as hominids were the preferred species of the slaver caste, having those really great hands.

Non-Sentient Intelligence

Another aspect of the Star-Daubers was that they were non-obligatory sentients. Their decentralized strategy for creating a large brain allowed them to assume two different neuronal configurations—*intelligent* and the more complicated *intelligent-sentient*. The

intelligent configuration was essentially a super-genius brain that lacked self-awareness. It could manage the Star-Dauber empire, design and build gravity-generators, repaint the Dyson sphere, etc, but it didn't know it existed. Under particular circumstances, the Star-Dauber would assume the more inefficient *intelligent-sentient* grouping. This involved many more Star-Daubers and resulted in no real increase in intelligence. This configuration was only useful for transactions with obligatory intelligent-sentients, situations where they were required to pass the Turing Test.

While it is clear that to be sentient, you have to be intelligent, it's not obvious that to possess hominid-level intelligence, you have to be self-aware. Self-awareness might be akin to the operating system of a computer, something that's required to integrate a variety of disparate cognitive functions. Or it may be

something that evolved to facilitate social interactions among hominids. Regardless, it's plausible to imagine that there are intelligent species for whom it is merely an option.

Space-Sentience

There are many accounts in science-fiction of sentient life that uses space as its natural habitat. Larry Niven has his *Outsiders*, liquid helium-II-based sentient beings powered by thermoelectricity. Fred Hoyle created *The Black Cloud*, a sentient, super-intelligent cloud of hydrogen gas, with a diameter equal to the Earth's distance from the Sun. Other science-fiction writers have proposed variations on these concepts, creating, for example, sentient beings composed of plasma confined by magnetic fields.

The problem with space-based sentient life is that it's hard to see how it might have actually evolved in the 3° Kelvin, essential vacuum of space, or in the 3×10^{70} Kelvin furnace of a star. It

would be enough of an accomplishment to create under these conditions the Bare Minimum Living Thing, defined by the exobiologists as an entity which can reproduce itself, mutate, and reproduce its mutations, let alone produce a sentient organism. The age of the Earth is 4.5 billion years. It is estimated that it took perhaps 5×10^8 years for the Bare Minimum Living Thing to appear, suggesting that in a planetary environment like that of the prebiotic Earth, the origin of life is a relatively straightforward process. However, even under these conducive conditions, it still took almost an additional 4 billion years for sentient life to evolve.

It might be possible for intelligent but not yet sentient planetary life to adapt to conditions in space and perhaps acquire self-awareness. This would be analogous to how cetaceans evolved from relatively dumb land mammals to relatively intelligent aquatic mammals. The conditions under which

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this could occur are not immediately obvious, however. Perhaps the slow loss of a planetary atmosphere might cause some species to evolve into space-adapted life. The Universe is a big place, and as the physicists say, anything that it is not forbidden is likely to be compulsory. On the other hand, there are probably some things in science-fiction that are, probably just *science-fiction*, and space-based sentience may be one of these.

An interesting extension of the space-based sentience concept is the idea that the entire *Universe* is actually self-aware. You could imagine that the complex, only partially understood forces between astrophysical objects could make the Universe function as a sentient-capable brain. The number of galaxies in the Universe is approximately the same as the number of neurons in a human brain, so maybe our galaxy is the functional equivalent of the 10^5 neuron to the left in the anterior dorsal portion of layer 5 of the

right inferior temporal cortex. Any thoughts that this sentient Universe might think would occur very slowly from our perspective, given that information can't be transferred faster than the speed of light, and the average distance between galaxies is millions of light-years. On the average, it might take 1 to 10 milliseconds for a neuron to modify the activity of another neuron, and 300–500 msec to produce a complicated act of neuronal processing such as a thought. If galaxies are the equivalent of neurons, then it would take a million years for the most basic information transfer, and 300 million years for a simple thought. These times would have been shorter in the early life of the Universe, as the distances between galaxies were smaller.

A sentient Universe would explain a lot of things. First of all, it would explain why such physical constants as the speed of light have the peculiar values that they have—when the Universe

awoke in the first few 10^{-43} seconds after the Big Bang, it simply *decided* what physical constants it wanted. It's too bad that it liked funny numbers that are hard to remember. For another, it would explain why we have such a *dumb* Universe—no Jedi Knights, no Podkayne of Mars—devoid of magic and meaning, and filled with horrible slobbering sentients who want nothing more than to make us into Human McNuggets. Obviously, a *dumb* place. If the Universe is no more complex than a human brain, and it takes 300 million years to finish a simple thought, it's not exactly what I would call a genius.

Other sentients are lucky enough to live in *smart* Universes, with better, more imaginative physical laws and Jedi Knights on every street corner. Not us. Is there anything that we could do about this? Yes. Read *aloud* to your Universe. Try to teach it a few new words every day. Take it to a *museum*. Perhaps

the SETI program would be willing to broadcast "Sesame Street" through its radio-telescopes. And as the Kzinti home in on our broadcasts, and begin to apply us to their highly sophisticated, technologically advanced double cheeseburgers, we'll all thrill with pride as coming from everywhere and nowhere, a great booming voice will be saying, "Duh . . . One? . . . Duh . . . Two? . . . Duh . . . Three?" ●

References

Duh . . . Still the best book on extraterrestrial intelligence is Intelligent Life in the Universe by I.S. Shklovskii and Carl Sagan, Dell 1966. A newer book that delves more into what might constitute the Bare Minimum Living Thing is Life Beyond Earth by Gerald Feinberg and Robert Shapiro, William Morrow Co., 1980. This book is recommended among other reasons for its discussion of space-based life. A less facetious discussion of why SETI-type programs won't work is given by Frank Tipler in the March 83 Discover, though, amusing or not, I think my "EAT HERE" argument is a good one. Finally, for a more expansive version of the Dolphins-as-Bright-Dogs concept, see E.O Wilson's Sociobiology: The New Synthesis, Harvard University Press, 1975.





The author claims this is his last tale of Ben Hardy, Time Detective, but we're not sure if we really believe him. Other Ben Hardy stories, "Time and Punishment" and "Time on My Hands," appeared in our May 11, 1981 and October 1982 issues respectively.

art: Val Lindahn

AS TIME GOES BY

by Warren Salomon

Mike Mackin's was my favorite bar in all reality, and I've been in a lot of them—bars and realities both. It was on the Upper East Side of Manhattan in 1965, decades before real time. Money was good, business was booming, girls wore miniskirts, and the future was bright with promise.

I treasured the place so much that I never missed a calendar night, no matter how much realtime passed between visits—except for a couple of days each month, naturally. You can't have too many flashback days lined up in a row or you'll get your worldlines wound up in a coil. That kind of thing can start a current that

could punch a hole in reality, and I don't need problems like that. In my line of work, things are tough enough already.

I looked up and caught my reflection in the mirror behind the bar. Hat brim pulled down over my eyes, cigarette dangling from my lips, beat-up trench coat flopping all over me—yeah, Ben Hardy, tough guy. Loner.

Solitary men make good time travelers, or so they say, but it works the other way around too. Time travel forces you into seclusion.

Outwardly I'm callous, aloof, very professional. That impresses a lot of people, but not women. They can sense things. So I go my own way. That's how it has to be in my business. I'm a time detective.

I was feeling somewhat guilty about being there that night, because my worldline coil was already at maximum length for one string of visits, but I promised myself I'd get a fresh start by not coming in tomorrow. Tonight, however, was a Wednesday, one of the better nights of the week at Mackin's.

Mad Mike himself was behind the bar. "Hello, trenchcoat," Mackin said.

"Hello, Mike. The usual."

"Sure thing—hey, fellows, Sam Spade's here." Mackin always joked about my outfit, but beneath the jokes he must have considered me a mysterious character. I minded my own business, spent my stock market winnings freely, and no one could figure out what I did for a living. What the hell, it was in the past—years before the invention of time travel—so it didn't matter what they thought. But I was a familiar figure at Mackin's, and I was comfortable there. It was one of the few places in the continuum where I could relax.

Everyplace else I'm on guard with people. I wait for them to speak to me, even if I already know them, because I'm likely to be in the past when they haven't met me yet, and I'm paranoid about causing anachronisms. I never reminisce with anyone for fear of mentioning something they shouldn't know yet. Hell, sometimes I remember a past that no one knows, and I don't want anything like that to slip out. I can't have a serious conversation with anyone, except for the occasional pro I might run across, and they're usually like me—not the most congenial types.

I can remake the world, then undo it and remake it again. I've done it before, more than once, and I have no doubt that I'll do it again. Worlds without end. I can change the shape of reality to be anything I want it to be. My power is without limits. But

realtime wealth eludes me, as does fame, and love, and even friendship.

The juke box was playing my favorite song. I mashed out my cigarette, lit up another, took a sip of my drink, and let the music flow through me:

... to every thing ... there is a season ... and a time to every purpose under heaven ... a time to be born, a time to die ... a time to kill, a time to heal ... a time to weep, a time to laugh ... a time to gain, a time to lose ... a time of war, a time of peace ... a time to love, a time to hate ... a time to every purpose under heaven ...

In a couple of years the war would turn sour, the country would be torn apart by strikes and riots, and nothing would ever be the same again. But if I used each flashback day in sequence, I could keep going to Mackin's for a lifetime.

So there I sat, a stranger in a strange time, nursing my drink and feeling sorry for myself, because I have done the greatest of deeds, but they are all unsung, and after years in the business I had nothing to show for it, and no one I could call a friend.

And then *she* came in.

Heads whirled. She was a real stunner—looked like an Olympic swimmer from one of the Scandinavian countries. I had never seen such an incredibly healthy-looking girl. She glowed. She was intelligent-looking too—clear eyes, steady gaze, and she held her marvelously sculptured head at a supremely confident angle. Why can't they all look like that? She was glorious—arctic eyes, chiseled cheekbones, full mouth, sensuous hips, narrow waist, radiant tan—and to the awed silence of a hundred staring eyes she stood at the door for a moment, glanced into her handbag, shut it, then walked over and sat down beside me.

"Hello," she said.

Speechless, I gestured to Mad Mike. He came over and took her order, his deferential manner telling me my stock had gone way up at Mackin's. I lit another cigarette, offered its smoke to the gods of entropy, then I squeaked out the best line I could think of at the moment: "Hi."

She waited while Mike served the drinks, saying nothing until he had walked to the far end of the bar. Then: "What the hell are you doing here?" she snapped.

"I live here," I improvised.

"Not according to my tracers, buster." She opened her bag sufficiently to give me a peek inside. It was packed with professional

gear, the same equipment I use to pick up the worldline radiation people give off when they're out of their own time. Beneath the bag, which she shifted slightly so I couldn't help but notice, she palmed a nasty-looking handgun.

I had never run into another pro before. Not while I was away from realtime. Or was she a pro? "Look, sweetie," I said. "I don't know what you think you're doing with that stuff, but—"

"You're no flatlander," she said. "Your worldlines are every bit as skewed as mine are." She patted the bag where her tracers were. "So what are you doing here?"

My mind raced. She could be a pro, like me, or she could be somebody who had come into the past to tamper with reality. Either way, she had the drop on me. "I'm on vacation," I said, which was true.

She smiled, tightly. Then she was all business again. "You a pro?"

"Yeah," I said. "The name's Hardy. Ben Hardy."

"I'm Bonnie Cockburn." She kept her hand on her gun.

I'm not very smooth with the ladies, but I tried my best to smile. "Glad to meet you, Bonnie."

She rolled her eyes to let me know my attempt at charm had failed. "I don't get along with the men in our business. I don't get along with anyone. You know how it is."

"Yeah, I know."

We drank. She was uneasy, and so was I. It was a first for both of us. "Like the place?" I asked.

"It's okay. No traces of anyone but us. I checked. They're all flatlanders."

"Yeah." Flatlanders. That's what we call people in the past. They don't realize it, but they have no free will. They once did, of course, but the wave-front of time has passed over them. They're still going through the motions that created their future, thinking they're in control of things, and in some sense, maybe they are. But they can't change anything they've already done—not without an assist from one of us. We're the pros from the true present—realtime.

"Seriously," I ventured, "I really am glad I ran into you. There's not many people I can talk to, and—"

"Looking for a shoulder to cry on, Hardy? Some nice little girl you can tell your troubles to? Keep looking. You haven't found her yet."

Dames. Why am I always attracted to the kind that can rip

through men like a chainsaw? I mashed out my cigarette. "Crap," I said.

"What's that supposed to mean?"

"It means you're screwing up a whole calendar night at my favorite bar, that's what. Why don't you find some other place to do your temporal slumming in?"

"Suits me fine. You're no big deal anyway." She put her gun away and snapped her bag shut. Then she stood up, gulped down the rest of her drink, and turned to go.

I lit another cigarette, stared down at my booze, and said nothing; but I was aware that she hadn't left yet. She was just standing there, playing some kind of game, expecting me to make the next move. I didn't look up.

"Ben . . ."

"Too late, sweetie. Like they say, some other time."

"Look, I'm sorry. I didn't mean to—"

"Good night, sweetie. Don't get your worldlines tangled up."

"Ben . . . I don't want to go."

"Why not?" I still hadn't looked up at her. You have to let women work things out for themselves. They can be rational when they want to; and if they don't, there isn't anything you can do about it.

She stood for a moment longer, then she sat down again.

I picked up my head, triumphant. "Mike! Two more here."

"Don't think that I'm sticking around because of your charm, Hardy. Believe me, you haven't got any."

"Then. . . ?"

"I'm here," she said, "because we've got a problem."

"What kind of problem?"

"How long since you were in realtime?"

"Couple of days," I said. "I really am on vacation."

"Well, I was just there. It's changed, Ben."

I groaned. Someone had tampered with reality, and had been successful. "What's it like?"

"We're regulated."

"What do you mean?"

"Our business—time travel. Heavy government regulation. Forms to fill out, user taxes, reports, pre-travel plans, permits, licenses—the whole works. We've lost our freedom, Ben."

"How'd it happen? We've never let anyone—"

"Look, why don't you go back and see for yourself. Then you'll know. I'll wait here for you."

"Okay. My module's in the alley, out back. It shouldn't take

long, but . . . let's not meet here tonight. I've got a phobia about being in the same place twice. Tomorrow night, same hour. Okay?"

"Okay."

"It's not the sort of date I had in mind, but it's a start."

She actually smiled.

I stood up to leave. "Oh, Bonnie . . ."

"Yes?"

"Don't change anything while I'm gone."

"Very funny."

My module was where I left it, at the end of a row of garbage cans, disguised to look like just another receptacle for trash. Despite its deliberately uninviting appearance, it was a time machine—the kind of thing fiction writers used to dream about, and what realtime journalists were still gushing over. But to someone in the business it wasn't very exotic, just one of the tools of the trade, and a very expensive piece of overhead indeed.

I gave the old bucket a loving caress, looked around to make certain I was alone, then I lifted up the lid, climbed inside, set the controls, and was gone. Before long I was in the alley behind my office, in realtime. I climbed out, picked up a dead fish from a nearby garbage can, and put it on the module's lid for camouflage. Then I strolled down the alleyway to the sidewalk and headed for the corner.

Everything looked the same, even the names on the street signs. As I stood there wishing I could afford an office in a better neighborhood, a kid bicycled by with a huge radio under one arm. He glanced my way, saw me, and made an obscene gesture with his other hand. Yeah, welcome home, Ben.

If there had been a reality change, it wasn't a major one. But it affected my business, so it was major enough. Besides, my job is to prevent reality changes, and a thankless job it was, too.

It was a cold day in late fall. I bent my head into a blast of raw wind, and dug my hands into my coat pockets for warmth. When you travel around in time, a trench coat makes a lot of sense; you never know what season you might end up in before the day's work is done.

My breath was a visible mixture of frost and cigarette smoke as I hurried past a row of shabby storefronts—flop houses, used furniture stores, saloons, and boarded-up vacant buildings. Then I came to the near-derelict edifice that housed my own operation.

From the sidewalk I could see the second-story window with

its peeling lettering that announced my professional existence to an uncaring world: BEN HARDY, TEMPORAL INVESTIGATOR.

I ducked into the doorway and watched a sheet of newspaper blow by like an urban tumbleweed, then I walked up the creaking stairs to the second floor, guided my echoing footsteps down the uncarpeted hallway, and entered my office.

I was curious to see how much of my personal reality was still intact, and I was anxious to keep my date with Bonny Cockburn.

I flipped on the computer and found that there were no messages waiting for me. Typical. I crushed out my cigarette, lit up another, sat down at my second-hand desk, tilted back my hat brim, and started sorting through the mail. It's surprising how often a real life change shows up there.

The first envelope, which I quickly tossed away, was from a life insurance company. Hell, if they knew my occupation they'd purge me from their mailing list as fast as they could. Next to go was an ad for suits made in the Orient. After that there was the expected letter from the landlord, reminding me how far behind I was in the office rent. Some things never change. I tossed that too. Ditto for the phone bill. So far, so good. Everything seemed normal.

The last envelope was one of those brown, cruddy-looking jobs from the government, with no postage stamps. It was from something called the Bureau of Technology & Analysis. T&A. They had a real zippy looking logo—all red, white, and blue—with an eagle and a slogan: LIBERTY THROUGH REGULATION.

I opened it up and unfolded some kind of quarterly report form. Name, address, ID number, serial number of my module, operator's license number, travel permit number, name of insurance carrier and expiration date of policy . . . yeah, yeah, yeah. Then the serious questions—years logged, temporal changes caused, incidents undone, results observed, names and addresses of clients and the fees they paid, purpose and permit number for each trip into the past . . . The thing was seven pages long, not counting the instructions. Bonnie certainly hadn't exaggerated.

My computer had records of forms I had filled out for several previous quarters, and some information about late penalties I had been assessed for not getting my stuff in on time. The only problem was, I had never heard of T&A before. Who the hell were they?

I got out my office almanac and looked them up. They existed,

all right, established five years ago by the National Technology Control Act, and headed by none other than Malcolm McGovern.

Then I reached in my coat pocket and took out the extra almanac I carry with me in my module—which is unaffected by reality changes that occur while I'm traveling in the past. It had no record of any bureaucracy named T&A.

It was obvious what had happened. Malcolm McGovern, a meddling do-gooder I had tangled with before, was up to his old tricks. He and his kind were always trying to change a few things around—to enhance the human condition, to take the rough edges off of what they saw as unrefined, brute reality—for the common good, you understand. That's what they all say, saints and madmen alike. But any reality change, no matter how slight it may seem, or how benevolent its purpose, is a threat to everything.

McGovern had altered the immediate past during my absence, and it was only luck that I happened to be vacationing earlier than his interference. Bonnie and I might very well be the only people alive who remembered that things weren't always this way—except for Malcolm McGovern, of course, and he was probably plotting something even more wonderful for his next adventure.

I spent a few minutes with the computer, telling it to call the library and get me a complete report on McGovern's activities. Then I had it make me a causal flow chart, pinpointing the likeliest times when the tampering might have taken place. One moment stood out from all the rest, five years ago, when he first met with a group of Congressmen and lined up their support. I made a printout of the coordinates and stuffed it in my coat pocket, along with the flow chart. It all seemed routine.

I walked over to the window and looked out into the alleyway below. There it was—third garbage can from the end, the one with the fish on top of its lid. The old time-tub was almost half paid for. In the wrong hands, a machine like that could mean the end of my reality—and there were far too many modules in the wrong hands.

I had a job to do. Once more I had to dash off, without pay, and save reality. I had to call on Malcolm McGovern five years before today, and prevent him from destroying my liberty. But first I had a date I didn't want to miss, with a pro named Bonnie Cockburn.

For a moment I wondered how many flashback days in a row I had been visiting Mackin's, and then I shrugged the thought

away. One more day probably wouldn't matter, and it was too late too worry about it. I didn't want to keep Bonnie waiting.

She arrived at Mackin's shortly after I did, and I observed that she had changed her outfit. All she had to do after our conversation yesterday was jump into her module and climb out again after a few seconds, subjective, in order to meet me a day later, but she had taken the trouble to change clothes to keep up appearances for the flatlanders. It was a good, professional touch, and it told me that Bonnie was okay.

I pulled out my flow chart and let her study it. We agreed on what had gone wrong, but we disagreed on what to do about it. I wanted to loop Malcolm, which meant going to the time of his tampering and sending him back to the exact moment he had come from. That way, his tampering never would have happened, and his interference with the past was blocked forever. He'd have to dream up some other scheme for his next assault on reality.

"Technically flawless," she said, "but not ruthless enough. Not nearly enough. He's tried this sort of thing before, you know, and he's aware of the looping technique. No matter how many times you loop him, he'll always try something else. He's a fanatic, and he's very sophisticated. We might not be so lucky the next time, Ben. All of us could be in realtime during his next attempt, and then he'll succeed." She paused for a moment, and then announced: "I'm going to croak the bastard."

"Hold it, sweetie. That's not my style." I reached into my coat pocket, then stopped abruptly when her gun suddenly reappeared in her hand. "You're fast," I said, admiringly.

"And you're dumb to try a stunt like that."

"Look, are we working together or aren't we?"

"I've never dealt with a competitor before. It takes getting used to."

"Think of me as reinforcements, sweetie, and put away the hardware."

"First show me what's in your coat pocket."

"I was just about to do that. Now hold on. I'll try it again." Very carefully, I took the pellets out of my pocket.

"What're those?"

"Something to fall back on, in case looping won't work. All I have to do is zap him with one of these and he develops a sudden craving for booze."

"So?"

"So he forgets all about his meeting with the Congressmen. He

heads for the nearest saloon, guzzles hootch until he passes out, and our job is done. Not only does his lobbying fail, but—"

She smiled, and it was dazzling. "He blows his holier than thou image! I like it." She put her gun away. "What's wrong?" she asked, studying my expression.

"It's not as clean as a loop, Bonnie. It's messy."

She reached out and held my hand. "Hardy, we agree that Malcolm's a menace to reality, right?" I nodded, not wanting to say anything that would interrupt the moment. "And we agree that he's got to be stopped once and for all, don't we?" I felt my hand in hers, and her gaze on mine, and I nodded again. "And we're partners in this, aren't we?" Again I nodded. Bonnie was very difficult to argue with. "Well then . . ."

"Okay, sweetie. You've convinced me." I pointed to the flow chart. "Here's where we're going, and I'll bet you my module gets there faster than yours does."

She grinned at me. "It's a bet, partner."

It was Malcolm McGovern, all right. My tracers left no doubt. It was five years before realtime and I had him right in my cross-hairs. The only traces I picked up were mine and his. Bonnie hadn't arrived yet.

All I had to do was approach him, convince him of the futility of his mission, send him back to the exact moment he had come from, and the temporal loop would be complete. It would be a perfect zero as far as he was concerned—a non-event. He could try it again all he liked, but it wouldn't work because it would already be blocked. Reality would once more be secure—for the time being.

But after his module failed to function a few times, McGovern would understand what had happened and he'd think of something else to accomplish his purpose. Maybe Bonnie was right and there were some people who needed more than looping. But where the hell was Bonnie?

I stepped out of my module, walked to the entrance of the alley I had parked in, glanced back to make sure my time tub was innocently disguised as one garbage can among many, and then I stared down the street. The tamperer was only a block away. Suddenly I sensed someone behind me.

"Turn around slowly!" a voice commanded. It was Bonnie's voice. I did as she said.

"I thought it was you, but I had to make sure," she said, putting her gun away. "You give off a nice set of traces."

"Bonnie, you can't pull a gun on me every time we run into each other. I'm going to start to think you don't trust me."

"It's this damn business we're in. It does things to you."

"Yeah. I know what you mean. Anyway, if you've been using your tracers, you know we're close to Malcolm. Follow me, sweetie."

He was almost two blocks away now, but it didn't take us long to catch up with our quarry. McGovern was on his way to the New House Office Building to meet with some of his influential pals and get them to vote for a law that had never been passed in the original sequence of events. In all likelihood he had a briefcase full of cash—acquired by tampering—to persuade our high-minded legislators that his law was in the public interest.

While he was waiting for a traffic light to change I loaded one of my pellets into a dart gun inside my coat pocket and manoeuvred through the pedestrians until I was standing next to him. With both hands in my pockets I pretended to lose my footing, bumped into him, zapped him, mumbled an apology, and watched him step off the curb. Midway across the street he hesitated and rubbed his hip where my dart had injected him. Then he looked around, saw a nearby tavern, and changed direction.

"That's all there is to it, sweetie," I said. "Mission accomplished, thanks to a little-known by-product of alcoholism research." I lit a cigarette, then tilted back the brim of my hat. "I don't think we have to worry about filling out forms for T&A any more."

"What now?"

"The usual. I'll sweep ahead for a few days, just to make sure, then—"

Without any warning, she leaned over and kissed me on the cheek. "Nice job, partner," she said.

I touched the spot. It tingled. "Thanks, Bonnie."

"How about a drink to celebrate?"

Dames. Their mood shifts are crazier than any reality change I've ever heard of. There were still a few clean-up details left over, but what the hell. You can't be a worrier all your life. "Why not?" I said.

As we walked back to where our modules were parked, a strange thought entered my head. "What do you know," I said to myself in amazement. "I've got a sidekick."

We began by returning to Mackin's, and several drinks later we ended up at my apartment, in realtime. I had wanted to take

her to one of the nice places I keep in the past with my ill-gotten gains, but she insisted on seeing the real me.

"This just might be the biggest mess I ever saw," she remarked as I opened the door for her.

"Yeah, I am kind of sloppy. It helps me relax, I guess."

"Interesting. You're meticulous in your work, yet you live like this. I'm afraid to see what the bathroom looks like."

"Unless you're made of ice cream or something, you're going to find out sooner or later. Might as well get it over with."

She smirked, and headed for the john. "Oh, gag!" she muttered, shutting the door behind her.

I poured us some booze, taking care to find a clean glass for hers. Then I sat down at my computer—a duplicate of my office rig—checked with the library on T&A, and was pleased to learn that they didn't exist. I left my question and the FILE NOT FOUND message on the screen so Bonnie could see it, and when she came out I showed it to her as I handed her the drink.

She nodded at the screen, took a swallow from her glass, and said: "Nice bathroom, Hardy."

"It wasn't so bad, was it?"

"I don't know how you can live like this, Ben. Really, this is awful."

"That bad, huh?"

She nodded, looking around. "Who's your decorator? King Kong?"

"Okay, you don't like the place. No one else does either, except me. What do you say we go out for dinner? I've got a little money left over from my last job. Not much, but what the hell. How about it?"

"I thought you'd never ask. What did you have in mind? Some nearby alley, no doubt. Your life is really messed up, Ben."

"All right, sweetie. You pick the place." And she did. But the trip across town was a real eye-opener.

Our cab driver was blond, which seemed fairly trivial, but so were most of the people we passed during the ride. We drove by a couple of movie theatres that had big hits playing, with kids lined up around the block, and every one of them was blond. So was the doorman at the restaurant, and the waiters.

"Bonnie, have you noticed anything strange?" I asked when we were seated at our table.

"You mean how everything looks like the Vikings have suddenly moved to our reality?"

"Yeah. And everyone else has moved out. Something's wrong,

sweetie. Something's very wrong. The population of the city never looked like this, not all of them. I don't think I've seen a single black person. Hell, hardly anyone even has dark hair."

"You know what, Ben? This isn't our reality. It's close; I mean everything's in English and the city looks the same, but it isn't the way we left it."

"Yeah," I said. "Here we go again."

We finished the meal, paid our blond waiter while the blond busboy cleared away the dishes, then we stopped at an all-night newsstand and bought a copy of every newspaper and magazine in sight. After that we went back to my place to study the situation. It wasn't difficult to learn what had happened.

The big news from all over the world was the fertility crisis, and the main player was an outfit named Aeon Laboratories, which had developed a partial cure. With that as our starting point, the computer dug out everything else we needed from the library.

The problem had started about thirty years ago when, for some unknown reason, something had sterilized the entire human population of the globe. For a couple of nightmarish years no one had been born anywhere, and then, twenty-eight years ago, Doctor Leon Aeon had synthesized a drug that permitted some people to have children again.

But the drug only worked for Caucasians, and not even for all of them. If an improved drug weren't discovered soon, the only people left would be white people, mostly blonds. Now, three decades after the crisis began, the entire under-thirty population of the world consisted exclusively of very fair Caucasians. The political and international situation was explosive, to put it mildly. The sterile three-fourths of the world was accusing the rest of genocide.

We spent a couple of hours reading up on the situation, during which neither of us spoke. Finally I put down the report I had just finished, got up and made myself a stiff drink. "Don't forget your partner," said Bonnie, so I made her one too.

I sat down, drink in hand, and said, "Doctor Leon Aeon must be a pretty rich man from all this."

"Of course, but that's too simple, Ben. Thousands of labs are working on the problem, all over the world. Aeon has no secrets, only patents, which he licenses to anyone for a reasonable royalty. No one could do a thing like this just to make money from it. It's too monstrous."

"Still, it's our only clue. And his headquarters are in this city, so it shouldn't be too difficult to check things out."

"Try the computer first," Bonnie suggested.

"Yeah." I went to the contraption and asked for a biography of Aeon, and as it scrolled across the screen I suddenly stabbed at the HOLD button. "Look at this!" I called to Bonnie.

She looked. "Orphan. He's covering his tracks. The sure sign of a time tamperer."

"Not necessarily, sweetie. I'm an orphan too. Lots of people are. But in this case I think you're right. Aeon looks like our man."

"But it's too obvious, Ben. Anyone could see it."

"Who's looking? All of these people think this is reality. If we hadn't gone back to Mackin's after correcting that McGovern thing, our memories would have been changed along with everyone else's. Aeon's had a free ride for thirty years, because no one in this reality suspected anything. To them, he's a hero—the best hope they've got. You and I are the only ones who remember that things used to be different."

"What now?" she asked.

Aeon Labs was started thirty years ago, around the time the crisis began. If he's the tamperer, he'll be giving off traces back around the time he first showed up. I'm going to take a look."

"What do you want me to do?"

"Wait here. I can't risk letting something happen to both of us. If I don't come back, you're reality's last chance. I won't be making any changes, so you won't get wiped out of existence. I'll just do some snooping around."

"Be careful, Ben. Aeon's playing a high-stakes game."

"We all are. When you play around with reality, sweetie, you're in the biggest game of all."

"Ben."

"What?"

"Can it wait until tomorrow?"

She put her drink down and for a few moments we looked at each other. Each of us knew what the other was thinking. Without saying a word, I walked over to where she was sitting, took her by the hand, and she followed me into the bedroom.

Like the song says, there's a time for every purpose, and if you don't have a strong sense of priorities, you don't belong in this crazy business.

I had a lot to think about the next day while my module carried me back thirty years—to the founding of Aeon Laboratories. Who

was Leon Aeon? Someone who had grandiose dreams of remaking humanity into his own image? How had he done it? Sterilizing the entire planet was no easy feat. And why had no one but his organization developed a cure? Hell, the whole world—at least this version of it—had been working on the problem for a generation now.

I knew it couldn't have been a natural phenomenon. In my reality—the original sequence—none of this had happened. What ghastly bit of tampering could have caused this disaster? And what if Aeon really were a hero in this reality, and someone else had done the tampering? Then where would I search? It's a big world, and tracers have limited range. I could spend a lifetime and never locate the cause.

Thirty years ago was before Aabner Aabbott discovered time travel. Yet the reality of time travel itself seemed unchanged. My apartment was unaltered, and my office, which I had checked before I left, still had all the tools of the trade. Aabbott was still in the almanac, right where he always was—the first listing. So the reality change was apparently limited to the fertility thing, and nothing else was touched. A lot of people didn't get born, of course, which altered a whole lot of things, but every difference between this world and mine flowed from a single reality change.

Suppose I find the tampering, then what? I'll have to undo it and restore the original sequence. Then what happens to the present world, the one with nothing but blonds? Gone, straight into Nature's dust-bin. Just another reality that happened to come along, and then go, and who's going to care anyway, once it's gone? Who cares about my own reality, the true one? I care; Bonnie cares.

What gives the two of us the right to wipe out an entire world? This one is here now. It's occupying the slot in the continuum that belongs to Earth. It's here, and maybe that's all the universe cares about. But I'm here too, and so is Bonnie, and we want our reality back. We'll get it, too. We're professionals.

Where is my reality—now, I mean? And where will this one go if I'm successful in destroying it? What happens to realities when they no longer exist? Are they only in my memory, or is there some little corner of the universe where Nature keeps the out-takes and plays them every now and then? Yeah. In some faraway Casablanca, Nature leans over the piano . . .

"You know what I want to hear, Sam."

"Oh, no. Not that one, Mr. Rick. You tol' me never to play that one."

"Play it!"

Then Sam's fingers tickle the celestial ivories, and the strains of a lost reality float through Rick's Cafe, as Sam sings a song about how you have to remember that a kiss is still a kiss, and a sigh is still a sigh, and the fundamentals always apply—as time goes by. Yeah. Except it doesn't always work out that way.

Why do I get all the crazy jobs, anyway? No one ever pays you to save the universe. All my clients are nickel-and-dime jerks who want me to go back to yesterday and find their lost dogs, and I'm usually so broke I can't get a square meal unless I duck into the past where it's legal to cheat. So why do I do this work? How did I get into the time game, anyway?

A clergyman is called to the ministry. A soldier is called to the colors. A lawyer is called to the bar. And me, what happened to me? I started to do my job, that's all.

My module was beeping at me. I had arrived in the alley behind Aeon Labs, the day they opened for business.

A temporal stake-out requires some fairly routine preliminary work, so I had timed my arrival for the first thing in the morning. Step one is to select a base of operations. I lit a cigarette and looked over the scene.

Aeon Laboratories began as a small, high-risk, business, in a low-rent part of town. Its days of fame and fortune lay in the future. The building Aeon had chosen to occupy was at the end of its block, with a front entrance on the main street and a loading dock opening to an alley in the rear. Across the side-street was a cheap diner where I could sit by the window and keep an eye on both entrances at the same time. That part of the job would be easy.

Step two was the acquisition of some cash, so the next thing I did was buy the early morning newspaper from a coin operated rack at the corner. Then I flipped my cigarette butt into the street, climbed back into my module, and got out the day before.

I strolled into the diner, took a seat at a table by the front window, and ordered some coffee. Hazel, the waitress, was perfectly cast for her role. She was an old, gum-chewing war-horse, with her hair in a bun, and a pencil stub in her hair. She was full of chatter about the new outfit that was moving in across the street tomorrow, and about all the other gossip of the neighborhood. After a few minutes conversation, she gave me the number of the local bookie. When she wasn't looking, I took out the next

day's racing news, ticked off my bets, and phoned them in. What the hell, it's all in the past, right?

Then I thanked Hazel, told her I'd probably be back tomorrow, and I disappeared into the alley. A few moments later, subjective, I reappeared the next day—a couple of hours after my original visit because I'm terrified of getting fouled up in my own world-lines—and visited the bookie to collect my winnings. Then I headed back to Hazel's diner.

I sat at the same table by the front window, drinking coffee all day, and handing out big tips to Hazel for the use of her table, and so I'd be left alone to make my observations. She gave me my privacy, and went about her business happily chewing her gum, yammering with her regular customers, and handing out those little, pale-green checks that come on a pad, the kind with red script on the bottom saying "Thank You" in unaccountable quote marks.

If anyone had been observing my activities that day, hoping to watch a temporal investigator in the exciting act of saving the universe, he would have been disappointed. There wasn't much to see except me, clad in my hat and trenchcoat, chain-smoking a few packs of cigarettes, sipping Hazel's coffee, and staring at the moving operation across the street.

All day long the movers bustled to and fro, hauling in office furniture and laboratory equipment, none of which appeared unusual. A phone company truck showed up about mid-morning, and a team of technicians entered the building to install the telephones. A sign-painter pulled up in another truck, and began to paint AEON LABORATORIES over the entrance.

Around noon-time the staff of Aeon Labs started arriving. There were executives, white-coated lab workers, secretaries—all the types you would expect, but one fact about them caught my attention. It was a detail no flatlander would have found remarkable, but I knew what the world would be like in thirty years. Aeon's staff were all blonds—every one of them

I took out my tracers and turned them on. The readings went right off the scale. There wasn't much doubt that I had discovered the culprits—not only Aeon, whichever one he was, but the entire organization. All of them were time tamperers. Bonnie and I had our work cut out for us.

I said goodbye to Hazel, paid the little green check she wrote out with the pencil from her hair, climbed into my module, set it for realtime, and headed for home—home in Aeon's reality.

* * *

Bonnie wasn't waiting for me at my apartment. Instead, I found the unmistakable signs of a struggle and a note taped to my computer screen. It read: *Mr. Hardy, if you ever hope to see Miss Cockburn alive again, you will cease your investigation of Aeon Laboratories.*

Just like that. The note reeked of arrogance. It was written by people who were accustomed to enormous power. They had used the name of their organization as an extra touch of insolence, thinking it inconceivable that I would dare to challenge them.

And why wouldn't they have that attitude? These were people who held life and death in their hands. If they smiled upon you, you were fertile; if not, it was the end of your line. But they had made a serious error in judgment. I had no need of their miracle cure. Reality was the antidote for the poison they had spread over the globe, and I wasn't going to let anything stand between me and my reality.

Even Bonnie—whose absence had made me realize how quickly I had grown attached to her—wasn't a good enough hostage to keep me at bay. There was something else I wanted that was even dearer to me—reality itself—and that was worth everything.

Or maybe they hadn't made a mistake. What if they knew I couldn't be frightened away, and they were using Bonnie for bait? What better way to lure me to my destruction? Perhaps they understood that she and I were the only threat to their plans, and now that they had captured her, getting rid of me was all that stood between them and their goals?

But what choice did I have? None, really. I had to either abandon the job, and hope they'd return Bonnie to me, or else I had to go and get her. There weren't too many alternatives available. But I needed to be certain.

When in doubt, consult the computer. It doesn't know anything you haven't told it, but it never forgets either. And it never panics in a crisis. So I switched the contraption on, updated it with all the information I could think of, and then I asked: How did they know Bonnie was here with me?

THERE ARE TWO POSSIBILITIES: A) SOMEONE TOLD THEM; B) THEY DISCOVERED THE FACTS FOR THEMSELVES.

Brilliant. So I asked: Who could have told them?

I AM PROGRAMMED TO SUSPECT EVERYONE. THE POSSIBILITIES ARE A) YOU; B) MISS COCKBURN; C) THE WAITRESS.

Forget me. Why Bonnie?

THERE ARE TWO FACTORS: A) SHE IS BLONDE; B) SHE IS THE ONLY OTHER PERSON WHO KNEW ALL THE FACTS.

Impossible. She's from my reality. I met her before all of this happened. Besides, if she and Aeon wanted me out of the way, all she had to do was shoot me. She's had loads of opportunities. Repeat: Why Bonnie?

I AM PROGRAMMED TO HELP YOU OVERCOME EMOTIONAL WEAKNESSES. MISS COCKBURN FITS THE PARAMETERS YOU TOLD NEVER TO IGNORE.

Idiot! Okay, she's my type. I like her; maybe I love her. Just answer this question: Is she likely to be working with Aeon?

NEGATIVE, FOR THE REASONS YOU GAVE.

Fine, we're making progress. Now why Hazel? What's the likelihood that it's her? Come to think of it, how would she know anything about me?

IF SHE WORKED FOR AEON, SHE COULD HAVE DETECTED YOUR TRACES AND REPORTED TO HER SUPERIORS THAT THEY WERE BEING SPIED UPON. A DETAILED SPECTRAL ANALYSIS OF YOUR TRACES WOULD REVEAL YOUR REALTIME ORIGIN. THE WORLDLINE RED SHIFT INCREASES DIRECTLY IN PROPORTION TO . . .

I hit the shutup key. The computer made sense, in a way. It could be Hazel. But she seemed like such a flatlander. So I asked for a probability readout, and the stupid machine gave a rating lower than I had ever seen before. It's not easy, talking to a program.

My next question followed the agenda the computer had supplied: Okay, we've ruled out anyone's betraying me from the inside, which leaves the other possibility.

CORRECT. AEON'S PEOPLE DISCOVERED YOU BY THEMSELVES, MOST LIKELY DURING YOUR RECENT VISIT TO THEIR TIME OF ARRIVAL.

Yeah. They were time tamperers, so they probably had tracers, and they easily spotted me in Hazel's diner. One of them probably recognized me. There aren't too many people in my line of work. They went to my place in realtime, maybe planning to trap me, and they chanced upon Bonnie. Okay, it fits. Then I asked: How did Aeon sterilize the planet?

MY BIOLOGICAL DATA IS INSUFFICIENT. SUGGEST ACCESS TO LIBRARY BANKS.

No time for that. Assume that he did it, somehow. Why hasn't anyone else come up with the cure?

PERHAPS THEY HAVE, MANY TIMES. AEON COULD EASILY TAMPER EACH SUCH DISCOVERY OUT OF EXISTENCE.

Why didn't I think of that? Aeon was maintaining his genetic monopoly with time travel. Any competing lab that worked out the solution would get a visit the night before and have its test tubes all gunked up with some kind of contaminant. Of course! Good old computer. Everything was suddenly simple. Now all I had to do was find Aeon's original appearance in the past, loop him, and the crisis was over.

But there was still the matter of rescuing Bonnie Cockburn.

I was much farther in the past than my last visit to Aeon's building. This time I was looking at the place while it was under construction, before the walls and doors were finished. Making a surreptitious entry is one of the simplest of all covert operations. All I need to do is study the building's layout while it's still in skeletal form, pick my spot, place the old chrono-crate in position, and zip forward to the precise time that suits my purpose.

Aeon's building was a two-story affair, with the labs downstairs and offices for the big shots on the second floor. One office was larger than all the others—Aeon's, no doubt—and it had its own bathroom and closet. Perfect.

I waited until the construction workers had left for the day, then I hauled the module to the spot where Aeon's closet would be, climbed inside, and appeared several years later, the night after Aeon and his gang had first moved in. Earlier that day I had been sitting in Hazel's diner, and to avoid getting tangled up in my own worldlines, my spying would have to occur on Aeon's second day in business.

I climbed out, drill in hand, ready to make a peep-hole for the next day's surveillance, when suddenly the closet door swung open, lights flashed on, and I was staring into the bad end of a .45.

The man holding it stood back from the door. He was of medium height and age, and grotesquely fat. "You may come out of there, Mr. Hardy," he said, grinning at me. "We've been expecting you."

My head was whirling. How could anyone have been expecting me? Across the office, tied to a chair, was Bonnie Cockburn. She looked frightened and lovely at the same time. "I'm all right, Ben," she said.

"How touching," commented our captor, his gaze shifting between the two of us. "As you may have guessed," he added, speak-

ing only to me, "I am Leon Aeon, at your service." He made a mock bow.

I spat two words at him.

"Don't be childish, Mr. Hardy," he said. "We have much to discuss, and I had hoped the level of our conversation would be somewhat above that of the sewer."

"I was only trying to make you feel at home," I said.

"I see you've allowed yourself to become upset, Mr. Hardy."

"Who me? Upset? Why? Because you've robbed three-fourths of humanity of their fertility? Because you're depopulating whole continents? Because you've destroyed my reality? Would I let a few details like that bother me? Certainly not! I concentrate on the big picture—for example, the fact that you're an extremely ugly-looking man. That bothers me."

Aeon sighed, in the manner of a man with infinite patience. "Sit down, Mr. Hardy," he said, gesturing with the gun to a chair beside Bonnie's, "There are a few things I need to explain to you, and you may as well be comfortable."

I glanced around the room, unwilling to sit and lose my mobility. I was still trying to figure out how Aeon had known I would be here. Then I noticed a module parked behind the desk.

"Oh, yes—that. Go ahead, Mr. Hardy. Take a look at it," said Aeon.

I did. It was a standard model—almost. But the control panel was different.

"Notice anything . . . ah, out of the ordinary, Mr. Hardy?" he said.

I looked closer at the controls, not believing what I saw. "The years," I said, "they go . . ."

"Indeed, yes. They go all the way to realtime."

"But . . ."

"Realtime for me, that is. You see, Mr. Hardy, I'm not from your time at all. I'm from your future."

"Now will you sit down?" said Leon Aeon.

I sat.

"My story is a simple one," he began. "I was born in your reality, Mr. Hardy, but somewhat after your own present. My father was a man of humble means, and my youth was unhappy and impoverished."

Bonnie and I exchanged winks, and we settled down to what was obviously going to be a long recital.

"In spite of that," Aeon continued, "I won a scholarship and studied medicine. Then I went on to do research, perfecting many

cures for mankind's ailments. Eventually, my efforts were rewarded with prosperity."

"Get to the good part, fatso," I said.

"All in good time. Mr. Hardy. All in good time." He smiled to himself, enjoying the play on words. Then he went on: "There was only one thing which marred my happiness, and perhaps you can guess what that was."

I shrugged. "Obesity? Insanity? Looking at yourself in the mirror? Any of the above; all of the above."

"No, Mr. Hardy. The problem was taxes."

"Taxes?"

"Indeed. Have you never noticed the huge sums which are confiscated from the incomes of our most productive citizens? No? Well, in your circumstances, perhaps you've had no reason to. But let me assure you, Mr. Hardy, I was most cruelly taxed. And for what? For defense? Surely not, for that consumes but a fraction of the nation's resources. No, Mr. Hardy, I was being taxed for welfare! For some craven sociologist's dream of a statistically pure, equal distribution of income on a per capita basis—as if men were equal in productive genius!"

I turned to Bonnie. "Is this clown serious?"

"Better listen to him, Ben. He's got the gun, you know."

"As I was saying, Mr. Hardy, I was unfairly penalized by the welfare system, and why? Because I was one of society's most talented and inventive individuals, that's why! I was taxed because of my brilliance! I was robbed of the capital I had rightfully earned—capital I needed to invest in my research. And who benefited from those odious taxes?"

"I give up, tubby. Who?"

"Parasites! Drones, loafers, criminals, the physically and mentally unfit!"

I looked at Bonnie and she gave me another wink. Thus cheered, I directed my attention back toward Aeon.

"Not only the unfit benefited, Mr. Hardy, but so did a whole army of social workers, bureaucrats, tax collectors, and sociologists! They all fed at the trough—a trough filled with the wealth I had created."

"You're not the first to complain about taxes, fat boy. What made you go astray?"

"Because I alone had the vision to comprehend the cause of it all, Mr. Hardy. There is but one cause of the welfare state, and I discovered it."

"Dumb politicians?"

He smiled and shook his head. "No. That's what everyone thinks, but that's not the real cause."

"The suspense is killing me, lard-bucket. Let's hear it."

"Inferior humans!" he shouted. "Billions of them, swarming over the globe, polluting it by their mere presence, demanding aid, alms, charity, and finally—through the power of their votes—forcing their way into the pockets of their superiors."

"I think you've explained yourself, Aeon. But surely you don't expect Bonnie and me to become your converts."

"I don't think you understand yet, Mr. Hardy. The truth is, you have no choice in the matter. Your consent, or the lack thereof, is the most irrelevant factor in the universe. I am immune to your feeble efforts."

"Why is that?"

He shook his head, slowly, as if in sadness. "I had thought you would comprehend more swiftly than this, Mr. Hardy. Very well, I shall spoon-feed it to you. You see, you're a flatlander. You have no power to alter anything I do, because you are part of my past. You may think you have free will—all flatlanders live under that illusion—but believe me, you're not a player in the game, Mr. Hardy. The future already exists, and it belongs to me."

I had known that was coming, but I tried not to show how much it affected me. "I assume there's no need for you to retain Miss Cockburn and myself any longer then. If we can't harm you, we should be free to go."

"Indeed, Mr. Hardy. You are both free to go. Now, if you wish. You're the last persons in the world I would care to harm."

"Why is that?" I asked, as he began to untie Bonnie.

"I rather hoped you would figure it out for yourselves by now," he said, sounding disappointed. "You and Miss Cockburn—you're my parents."

"Hold on a minute," I said, rubbing my forehead. "I'm . . . you're . . ."

Aeon nodded in his leisurely fashion. "That is correct. I am the future son that you and," he looked in Bonnie's direction, "my mother here, will have."

"My son . . ." I couldn't resist the next line: "My son, the doctor."

"Yuk, Ben! Is that the best you can come up with?" said Bonnie.

"You mean my jokes or my offspring?"

"In any event," said Aeon, "you now see how impossible it is for us to harm one another. I am invulnerable so far as you are

concerned, because as a flatlander—which is what you are to me—your freedom of action is totally circumscribed by events which have already passed. I, on the other hand, have no desire to undo my future conception.”

“I don’t think I like the idea of being your father,” I said.

“Believe me,” said Aeon, “it was no great pleasure being your son. You’re not all that easy to get along with, you know. It took me years to overcome—”

“Great. You’re not even conceived yet and you’re already blaming me for your problems. I suppose your next line is that you never asked to be born.”

“This is getting us nowhere,” he said. “Both of you are free now, and you have at your disposal the module that, ah, Mr. Hardy came in. I suggest you go back to your own time and, shall we say, get on with what must be.”

“Leaving you here to remake the world?”

“That is correct. It’s already done, from a realtime point of view, and your sole remaining duty, as a good citizen of the past, is to marry my mother and bring about your future—a future which already exists, and which you are powerless to destroy.”

“I suppose I will give you a bad time, Leon. Anyone would if he had a son like you. But then, this little scene is your revenge, isn’t it? You grew up knowing that reality is all I cared about, and you’ve been looking forward to this for a long time. Are you enjoying it as much as you hoped you would?”

“Yes, thank you. It is even more delicious than I imagined—Father.” He smiled an evil smile. “You may go now. You will witness, in your declining years, the end of the world you valued so highly, and the dawn of the new age, and you will go to your grave with the knowledge that you were responsible for bringing it about.”

I led Bonnie to my module, helped her climb in, and I got in beside her. Then I turned back to look one last time at Leon Aeon. “Hey, fatso.” He raised his eyebrows. I repeated the same two words I had used before. Then I crouched down, lowered the module’s lid, and we were gone, heading back to realtime.

But where could I go to stop Leon Aeon?

Bonnie and I didn’t speak much during the trip back home. I was mulling over the implications of what Aeon—our son—had said. Over and above his madness, which was towering, and beyond the blow to reality, which was crushing, was an even greater factor to consider. I was a flatlander. There was a future which

already existed, ahead of my own realtime, and if that were true then I had no free will, no ability to affect anything. I was just going through the motions, like the patrons of Mike Mackin's saloon.

Reality is one thing—and a very dear thing it is, too. But I had suddenly lost a higher value, one I had always taken for granted. My freedom of action, my volition, my free will—the quality that makes me a human being—it was gone. Or was it?

Could it be that merely because a module arrives from some future beyond my own time, the freedom of my entire slice of spacetime vanishes? But I was still thinking, wasn't I? Could I have lost my free will and still be conscious of the fact? Why not?

Flatlanders think; they're conscious. I should know, I've dealt with enough of them. But they can't change anything, not of their own free will. They can't affect my realtime unless someone's been tampering with them. So I can't change Aeon's time either. But I'm a temporal investigator, a pro! I wasn't always a flatlander, was I? How did this happen?

Did Aeon's arrival from his future put an end to everything? Does free will vanish, just like that? One day, out of nowhere, Aeon shows up and zowie—we're all flatlanders? Then what is free will? A quality of the mind, or of spacetime? If you're in the present—whatever that means—you've got free will, and if you're not, you don't. So where's the present? The place where the latest modules come from? Does that make any sense?

I had always thought the present was the interface between the two main kinds of reality, potential and kinetic. In the natural, entropic flow of things, potential reality becomes kinetic, the present moment moves forward, and the present of a moment ago becomes the past. Yeah, and the instant of interface is realtime—and it was mine. What happened to change everything? The future isn't supposed to exist yet.

How did a potential future gain power over the present? Causality is supposed to work the other way around. Who's running this show, anyway? I thought I was, along with everyone else in realtime. But maybe that was just a form of reference-frame chauvinism.

So who lives in realtime? Hell, with time travel, maybe we all do. Or none of us do. If I can be visited by my unborn son, I certainly don't live in the present. Does he? What if Aeon's realtime were visited by a module from a still farther future? Does Aeon lose it too? Can an infinity of realtimes be robbed of free

will by an infinity of invading modules, each one from an even newer future?

Everything was whirling around in my head, and all the silly paradoxes from pre-Aabbott science fiction were suddenly starting to bother me. The most bothersome thing of all was that I *knew* I had been a part of realtime, and somehow I let it get away from me.

The module arrived, and when we got inside my apartment Bonnie and I just sat there, sipping our drinks, looking at each other. She was a pro, so I knew she was having the same thoughts I was. And I thought about one more thing—the son we were going to conceive, if we hadn't done it already. It was something I wanted to delay, at least until I could think everything through.

"Sweetie," I said.

"What?"

"Not tonight, okay? I've got a headache."

"Your wit is as weird as always, but don't worry. It's too soon for me to get pregnant."

"Oh. Are you sure?"

She shot me the sort of look I give to people who talk about the zodiac, and then she grinned at me. "Headache feeling better?"

"Yeah, sweetie. Suddenly it's all gone."

"Then you sit here and play with your computer. I'm going to get freshened up. I need it after what I've been through." She glanced around the room, which was still messed up from her earlier struggle, then she gave me a quick kiss and skipped off to the bedroom.

A moment later she stuck her head back out. "Ben . . . we're happy, aren't we?"

It was a strange notion, coming as it did in the middle of all our problems, so it took me a few seconds to think about it.

"Yeah," I said, pleasantly surprised at the discovery. "I guess we are."

She blew me another kiss, then ducked her head back into the bedroom. I was really starting to like Bonnie, and that also bothered me. It made Aeon's reality seem very secure.

I lit a cigarette, poured myself another drink, sat down at the computer, and ran through my earlier question and answer session. Nothing seemed to make sense now, and what troubled me even more was that I no longer seemed to care. I switched the thing off because it was useless. The situation was beyond its programming. The only intelligent thing it had said was that

Bonnie fit my parameters. Yeah, Bonnie. I sipped on my booze and ran the whole mess through my head.

Item: Before I met Bonnie I was living in realtime, and the Aeon reality hadn't existed yet.

Item: I met Bonnie in the past. I assumed that she came from my own reality, but did she? Of course she did. After I met her I went back to realtime to check out her story and find out about Malcolm McGovern. Reality was still okay, up to that point. The only problem was the McGovern thing, which we fixed—

Wait a minute! We didn't really fix it. Not the way I wanted to. Bonnie talked me out of looping him. Instead, we tampered! We sent him into a saloon. Is that significant?

Item: After that we went back to Mackin's—which was Bonnie's idea—and that's what saved us from getting caught in the reality change. Then we came back to realtime and discovered the Aeon reality had taken over. Yeah.

I turned the computer on again. Question: Did my interference with McGovern cause the Aeon reality to exist?

NEGATIVE. SAVING REALITY SHOULD NOT ALTER IT.

But I didn't loop McGovern.

INPUT FULL DETAILS!

I complied. Question: Did I cause the Aeon reality to exist?

WHEN A MAN ENTERS A BAR, ANYTHING CAN HAPPEN.

What kind of response was that? Hell . . . oh, yeah. Question: Who else was in the bar that day?

INSUFFICIENT DATA.

Question: Who works there? Can you find out?

PRIVATE EMPLOYMENT RECORDS ARE NOT AVAILABLE THROUGH PUBLIC DATA BANKS.

Try public stuff. Newspaper articles, magazines, anything. It's a bar in the nation's capitol. Something must happen there from time to time to get the place in the news. Maybe an employee was quoted as a witness to a crime or something. Search everywhere. Wide scan.

THIS WILL TAKE TIME.

I told the dumb hulk to proceed, and I enhanced my drink again. Bonnie was busy in the bedroom, doing whatever girls do. Probably painting her nails or something. I walked over to take a look. She was on the floor, dressed in a skin-tight red leotard, with her hair tied back, and she was doing pushups—good ones. So much for my visions of sugar and spice.

The computer started beeping at me so I ran back to it. SEARCH COMPLETED. I HAVE SIX NAMES. The screen cleared, and

then the names popped up, one by one, complete with the source references. One of the names was that of a barmaid—Agnes Cockburn!

Yeah. McGovern goes into the bar, meets Agnes, the inevitable happens, and Bonnie is born. So? Everyone gets born, somehow. Did I care if Bonnie's father was Malcolm McGovern. But . . . we caused it to happen, which makes Bonnie a very special problem in causality. She's not one of those bootstrappers, people who manage to become their own ancestors. What could you call her—a catalyst?

Hold on, Ben. There's another problem here. The McGovern thing happened only five years before realtime, so any daughter they had would only be five years old now, and Bonnie was around twenty five. So it couldn't be her. Or could it?

Aeon came from the future; didn't he? Why not Bonnie? I jumped up and grabbed my tracers, We were in realtime now. At least I was in mine. No one gives off traces in his own present. I strolled into the bedroom.

Bonnie was lying on the floor with her legs propped up on a chair, doing sit-ups the hard way. I left the room, satisfied that she wasn't watching me, and I turned on the tracers. The readings were nice and clear. Bonnie was from the future.

I've been in the time business for quite a while now, and I've seen some strange situations. But this one topped them all. Aeon had come from the future, and he said Bonnie and I were going to be his parents. Okay, I don't like it, but I understand it. He hasn't been conceived yet, although he will be.

But now it turns out that Bonnie is from the future too, and she was conceived around five years ago when she and I tampered with Malcolm McGovern, who was himself a tamperer, but never mind that angle for now. Let's just concentrate on Bonnie. She's Aeon's mother, but he's older than she is, so they come from different times, neither of which is my realtime. Great. I've got three separate sequences going all at once—Aeon's, Bonnie's, and mine. So where does that leave things?

Suddenly it hit me. All my career I've been avoiding worldline tangles, because when you double back on yourself the possibilities for paradox are almost endless. But that's not the only thing to watch out for in this business. We're supposed to be extra cautious about creating a worldline coil—stacking up too many consecutive flashback visits in a row. A coil like that creates a

spacetime corridor charged with negative causality—whatever that is—which can make a breach in the realtime interface. Yeah.

I tried to think back to my training, to all those dry, boring lectures on matrix theory and spacetime vectors. Not much was known, but the best guess of the experts was that if a worldline coil became long enough, the charged corridor inside the coil becomes—what was the expression?—a probability hole in the interface. That was it.

Potential reality flows backward through the corridor, puncturing the realtime barrier, and something can come through. So what came through in this case? Something having to do with me, no doubt, because it was my worldline that formed the structure of the hole . . . Of course! It was Bonnie.

She popped out of nowhere while I was at Mackin's, because I must have been there one day too many without a break. And she got me to visit the place the next day too, just before the McGovern affair, which lengthened the coil and strengthened the corridor. Yeah. The probability hole began to reinforce itself. Then she talked me into tampering with McGovern instead of looping him the way I wanted to, and afterwards we went back to Mackin's to celebrate. More reinforcement. The hole in the fabric of spacetime must have been huge by then, and it was stabilizing itself, growing stronger.

Following that came Leon Aeon, the next generation, from yet another realtime. And right away he began tampering with the past to shore up his own reality. All that potential energy was pouring through the probability hole I had created just by hanging out an extra night at Mackin's. Talk about one too many . . .

I made myself another drink and started a new pack of cigarettes. My thoughts were on very speculative ground, but everything was starting to come together. Now how would I undo the mess I had made?

I couldn't get into the future where Aeon came from, because my module just doesn't go there. And I couldn't stop him in the past because I'm a flatlander to Aeon, so he had already survived anything I might try. Then what leverage did I have?

There was no way I could stop myself from tampering with McGovern. My worldlines are fouled up enough as it is without deliberately going back and crossing over them. So I can't stop Bonnie from being born. Hell, I don't want to do that. She's innocent, really. None of this is her fault. Or is it?

From the moment she appeared, everything she did was guaranteed to strengthen the probability hole and solidify Aeon's real-

ity. She was his mother. He certainly didn't get his ideas from me. And she was also the daughter of Malcolm McGovern, wasn't she?

There was only one way to find out. I strolled back into the bedroom, wondering what Olympic contortions Bonnie was going through now. I found her on the floor, on her back, with her legs raised up forty-five degrees.

I watched her lying there, motionless, for over a minute, then she turned her head in my direction. "How's the computer work going, Ben?"

"It's coming along, sweetie. How's Agnes, your mom?"

Her glance darted to the bed and mine followed. Her gun was sitting there, right out in plain sight. Damn! Why hadn't I noticed it earlier?

What followed was a demonstration of agility worthy of a gold medal. In one fluid, almost instantaneous motion, she was up and diving for the weapon.

And so was I.

I grabbed it first.

"Nice try, sweetie."

"What's this all about, Ben?"

"You weren't expecting any of this, were you? That's very interesting. I thought you folks from the future had all the answers. Apparently, my realtime still retains its character."

"You're babbling nonsense."

"No I'm not, sweetie. This *is* realtime. You and Aeon came through a probability hole, which is purely a local disturbance in the continuum. I still have free will. Aeon's reality is getting stronger all the time, but it hasn't become universal yet. It will, eventually, unless I clear things up."

"You can't. Don't you understand? The future is already here."

"Your future, Bonnie?"

"Yes! Mine, and our son's. Can't you see his greatness, Ben? Don't you realize what we've created? What we will create? Our son will remake the world. Is it so hard to comprehend that he will also choose his parents?"

"So that's how negative causality works. He recruited you, didn't he? He sent you back to meet me so that we'd bring your parents together and you would be born. He knew all along that during our little adventure, we'd—"

"Exactly, Ben. There has been nothing like our son since time began! He's a world-maker. And he made himself, too. Think of it, Ben. Our son!"

"I think I'm going to puke."

"If I had to live in the filth of your reality, I'd puke too. How could you stand it? All those horrible people, most of them retarded, living wretched lives, doing meaningless labor or—most likely—living off the taxpayers, mindlessly breeding, stealing, mugging, spawning hordes of degenerate children to defile the next generation. Where will it end—war, starvation? Is that the kind of reality you're fighting for, Ben?"

"It's their reality too, Bonnie."

"Come off it. Do you expect me to believe your heart bleeds for all those zombies out there? Do you really care what happens to them? Besides, Leon's way isn't cruel. They live out their lives, undisturbed. It's very humane, the new reality."

"Yeah. Except you decide who has kids and who doesn't."

"Who should decide? *Them*?"

"Why not?"

"Stop it, Ben. You're breaking my heart. Those pitiful creatures out there can't even get through the day without help from the taxpayers. They haven't the competence to make decisions like that. You've supported them all your life. Do you want the next generation to support their worthless offspring? Where will the food come from? What about the other resources they consume? Those people produce nothing, Ben. What right do they have to exist?"

"Wouldn't it be simpler to repeal welfare and let them work it out on their own?"

She laughed. "You're hopeless. Incurably optimistic. There hasn't been such faith in the common man since the days of Thomas Jefferson."

"Why, thank you, Bonnie. That's a lovely thing to say."

"Put the gun down, Ben. You're not going to use it. I wasn't going to use it on you, either."

"You grabbed for it fast enough."

"Training, that's all. You surprised me when you mentioned my mother."

"I was rather surprised myself when I learned that Malcolm is your father."

"Nobody's perfect. Now put the gun away."

"And then what?"

She reached behind her head and pulled something, allowing her golden hair to tumble down to her shoulders. Her eyes closed for a moment, then she looked at me through her lashes.

"And then make love to me," she said softly.

"Tempting, sweetie. Really tempting, But then I'd be playing Leon's game, wouldn't I? That's what you've had me doing ever since you showed up. I understand more than you think, Bonnie. You're not real, and neither is Leon. Not yet, anyway. You're trying to be real, but you're only a figment of the future that fell through a probability hole, and I'm the only one who can close it up again. If I don't do it soon, I may not be able to later."

She made a couple of swift motions, and the leotard she was wearing became an empty red wisp on the floor. "Ben," she murmured. "We can talk about it later, can't we?"

"I don't think so, sweetie." I walked out of the room. She followed me and watched me put on my hat and trenchcoat.

"Where are you going?" she asked.

I stared at her. It was difficult not to, under the circumstances. "I'm leaving you, Bonnie. I'm headed for the past to hide out for a while. Who knows? Maybe I'll be able to forget you, eventually. But one thing's for sure—I'm not going to hang around and help you conceive Leon. And that means he won't be born, and no one will recruit you to go into the past to seduce me. You won't persuade me to tamper with Malcolm, either, which pretty much leaves you out of things. None of this will have happened."

"That's tampering, Ben. A pro isn't supposed to do that."

"Restoring reality is the opposite of tampering. You should know that."

"You can't change reality that easily, Ben. The future already exists."

"Not yet, sweetie. You came out of potential reality through a rip in realtime, and if I don't cooperate, there's nothing to sustain you. The probability hole will collapse from its own instability, and I'll be in the past when it happens. When I come back, you'll be gone, and so will the world of Aeon Laboratories." I walked to the door. "Actually, you were never here."

"Look at me, Ben! I'm real! I'm as real as you are!"

I looked at her. "Nice. Maybe in some other reality, sometime. But not now." I reached for the door knob.

"Ben!" Her voice cracked. "If you leave, what will happen to me? Where will I go? What will I do?"

As I opened the door I recalled a scene from an old movie. I turned back for one last look at Bonnie Cockburn, and said: "Frankly, my dear, I don't give a damn."

But I do give a damn; that's the hell of it.

I'm in Mike Mackin's again, this time after a full month's in-

terval—flashback time—since my last visit. You've got to keep moving in the time business. Can't let your worldlines coil up behind you. When Mike asked me where I'd been, all I said was, "Away." He couldn't possibly guess how far away.

I had accidentally created a probability hole, and the only way it could continue was for me to participate in the tangled events it led to. By failing to cooperate in the spawning of Aeon—a curiously negative form of tampering—I broke the chain of future events. Bonnie was never encouraged by her son to tamper with me, so she didn't cause me to tamper with McGovern.

Up ahead a few years, a firm named Aeon Laboratories will never get founded, and the fertility crisis won't happen either. The tamperer who caused it all was never conceived, and neither was Bonnie Cockburn, his mother. Everything is as it was. I never met Bonnie. It never happened. The mutant reality of Leon Aeon was aborted, by abstinence. Nature works in strange ways.

Malcolm McGovern is still an unresolved problem, and when I finally get back to realtime I'll find the T&A report waiting for me in the mail. The next time around I'll handle it more skillfully. Causality is flowing in the right direction again, and Bonnie won't be there to distract me. After a few years of wiping out one false reality after another, a pro starts to get cynical. The old-timers in this profession have a saying: When you've seen one reality, you've seen them all. I know that for what it is now—an attempt to create verbal scar tissue. If you let yourself think about the worlds you've destroyed, you'll end up in the bug-house, fast.

I'm trying not to think about Bonnie Cockburn, of how it must have been in her final moments, hoping I'd come back, knowing I wouldn't, wondering when she'd lose her existence as the probability hole which sustained her gradually lost its strength.

What was it like? Did her world swirl away, dreamily, because of the dying spacetime hurricane, spinning ever slower, until finally everything ceased to be? Or did it end suddenly? One moment, existence; then nothing.

I don't want to think about her, but I can't help it. Realities aren't all alike. Of all the false realities, those that have been, those that will be, those that might be, and in the boundless universe that somehow manages to contain them, there was a world where, for a brief while, I was happy.

The juke box is playing my song again, and Mike is refilling my glass. I look around the bar at all the flatlanders. Some good-looking girls are here tonight. Who knows, Ben? Reality owes you a favor or two. Maybe tonight you'll get lucky. ●

THE LEOPARD'S DAUGHTER

art: Gary Freeman



by Lee Killough

The author reports that she's still trying to find time for eating and sleeping between her job in the radiology department at the Kansas State University College of Veterinary Medicine and her evening and weekend time at her typewriter. She's just finished a batch of short stories, of which "Leopard's Daughter" is one, and is putting the finishing touches on her latest novel.



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The wind reeked of carrion. Wrinkling her nose in distaste, Jeneba wondered how Tomo Silla could have chosen such a camp-site for Mseluku Karamoke's army, even just overnight. None of her brother and sister warriors appeared to notice the stench, however, and Mseluku had even complimented Tomo on the beauty of the lake and its wooded shore, so Jeneba said nothing. She tethered her horse and after leaning her spear, sword, and shield against a tree, joined the small party gathering wood. Seventeen years had taught her it was wiser not to mention her keener-than-human senses of smell and hearing, or anything else which might remind people that Jeneba Karamoke was not a full-blooded noble nor pure Dasa.

Bending down for a dried branch, she wondered bitterly again at the perversity of a King's sister disdaining all human suitors to take a leopard-man for a lover. Sia Nyiba Karamoke's failings would not ruin her daughter's life, though, Jeneba vowed. Her soul was Dasa and one day people would see that and accept her as truly one of them, not just tolerate her because she was Mseluku's niece and without a brother who might inherit the King's sword and shield.

She had come close today. Memory rushed back exhilaratingly . . . the earth warm beneath her bare feet, sun heating her arms and shoulder bared by the wrap of her saffron-colored tsara, her shield heavy on her left arm, but her sword arm working tirelessly as she and her warrior partner Kinetu Kone fought side by side in perfect partnership, cutting through the Qeorou line like field workers harvesting grain. How magnificent they had all looked, tall and lean above the Qeorou, skins dark and richly red-brown, the bright beads strung on the long ropes of their hair clicking together with every movement. She and Kinetu had embraced in celebration as the Qeorou withdrew. He called her *sister*.

Behind her, the others in camp sang in celebration of the victory and their pride in being Dasa, led by Mseluku's bard.

Hooooh! Dasa!

We are fierce warriors, lords of the Sahara plains.

The Creator Mala-Lesa smiles down on us,

Both her moon by night,

And his sun by day.

Our buffalo totem, powerful, wise, smiles on us.

We fear nothing,

Not Qeorou or Burdamu,

Not wizards or witches,

Not the demon nogama nor the half-men wachiru,

Not lion-men, leopard-men, hyena-men.

We trade where we will.

We hunt the wild buffalo and sheep.

We fatten our cattle on the sweet Sahara grasses.

We march into battle and emerge victorious.

Hoooooh! Dasa! Hoooooh!

"Hoooooh! Dasa!" Jeneba echoed.

A throaty voice spoke from above her. "Greetings, sister."

Startled, she glanced up before she could stop herself, so that by the time she saw the leopard sprawled along the tree limb overhead, there was no way to pretend she had not heard the beast. She could only hope that the sister warrior gathering wood nearby had heard nothing. Jeneba bent to reach for another piece of wood. "I'm not your sister," she hissed.

"Ah?" the leopard said lazily. Jeneba glanced up to find it regarding her with amusement. Its tawny eyes blinked with cat slowness. "But I smell leopard in you, and see that you have leopard-tawny eyes. You also understand me, which no one fully human can."

Jeneba set her jaw. "I am Dasa and a noble of the city of Kiba, not a leopard's daughter." Turning away, she started back for camp with her wood.

The leopard sighed. "How unfortunate, for if you were my sister, I could warn you about this place."

The smell of carrion seemed suddenly stronger. Jeneba's neck prickled. Whirling back toward the leopard, she cried, "What warning?"

But the leopard had gone.

Something else moved in the woods, however. Jeneba saw nothing, but she heard stealthy steps. Dropping her wood, she raced for camp . . . for her sword.

Warriors stared in astonishment as she raced past them.

"Swords," she said, and had no time to explain further. As her fingers closed around the hilt of her sword, a gust of wind brought a chorus of whoops madder than those of hyena and a carrion reek in such strength that Jeneba choked and the horses reared snorting against their tethers. She whirled, tossing aside the sheath, and the woods erupted with men who looked as though they had been split lengthwise. Smaller than the Dasa and naked except for loincloths and grey clay painted on their skin, each hopped on one leg and swung a club with his single hand.

Cold rushed through Jeneba. *Wachiru!* No wonder she had seen nothing in the woods. The half-men kept their invisible off-side

toward the camp as they approached. All they could not hide was the stench of their man-eating breath.

And yet, wachiru attacking men in a group? Unheard of. She answered their cries with a war yell of her own, however, and hacked at the nearest attacker. He parried the blow with his club, then pivoting away, vanished. Jeneba slashed for the spot where he had stood, but her sword passed through without meeting resistance. The wachiru reappeared off to her left, his club already aimed at her head.

Jeneba ducked barely in time. The club caught at her hair in passing, clicking off the beads. Fear burst in her with icy fire. Straightening, she lunged slashing, and this time her blade opened the wachiru's belly. He doubled screaming, bloody loops of gut ballooning between his hands. Jeneba retreated until she stood with her back against a tree, sword ready for another attack from any side.

Around her wachiru clubbed warriors to the ground. Screaming horses snapped their tethers and bolted into the woods. Other wachiru dragged unconscious members of the wood gathering party into camp. Several warriors managed to reach their swords, however, Mseluku among them, and they hacked away at every wachiru they saw. Seeing their opponents was the problem.

Jeneba shouted a warning at Mseluku, who had three half-men closing on him off-side-first. She sprang away from her tree to his aid. No monster would eat *her* uncle!

Something moved at the edge of her vision, but before she could dodge the club she sensed coming, pain burst through her. Mala-Lesa recreated the heavens in her skull in a single fiery burst and Jeneba fell into a bottomless black hole . . . through the earth, through the underworld of recent ancestral shades, through the dimmer kingdom of older shades, and into the lowest depths where the very oldest shades must finally go, a place without light, warmth, feeling, or even memory.

Or did it have sound after all? Shades gibbered shrilly at each other. Then she saw light, a dancing red glow, and felt a lumpy surface beneath her. Her hand finally convinced her that, astonishingly, she remained alive and on earth. It still grasped her sword.

She opened her eyes painfully to find herself at the base of the tree she had used to guard her back. Although drums pounded in her head and great stones seemed to weight it, she could lift it enough to see torches set in the ground and wachiru men, women, and children hopping back and forth across the campsite.

Children, naked, and women, bare to the waist like their men, chattered excitedly as they bound the legs and arms of warriors. The few they left unbound lay with the unmistakable slackness of death. That explained why Jeneba still lived. Dead victims must be eaten quickly and the wachiru wanted to save some meat for another day. She shuddered at the thought of herself spitted and roasting.

The wachiru had not reached this end of the camp yet, judging by her still-free hands. Was anyone watching her? Jeneba saw no one. There was only one way to be certain. Taking a deep breath and praying to the buffalo for safety, Jeneba wiggled backward, dragging her sword and head. No one appeared to notice. She kept moving, edging gradually around the tree.

She had almost reached cover when a female voice cried in alarm. Jeneba jumped to her feet, but realized in one sickening instant that she was too dizzy to run. She caught at the tree, her mind racing in panic, searching for an escape.

Tree? She looked up, mind clearing. Wachiru could not climb. Perhaps they would not think of her doing so.

Clamping her sword in her teeth, Jeneba scrambled for the branches.

Mala-Lesa and the buffalo smiled. While she crouched in a fork clutching her sword and the slice-of-horn talisman around her neck, her heart drumming in fear, the wachiru milled around the bottom of the tree sniffing the ground and air . . . but they never looked up, and after a short search, returned to tying their captives. Finishing that, they started off through the woods, carrying the bound warriors.

Above them, Jeneba counted the casualties through teeth gritted in sorrow and anger. Kinetu hung over a half-woman's shoulder, blood dripping down her back from his smashed skull. Half a dozen other warrior brothers and sisters were dead, too. The side of Jeneba's skull throbbed in reminder of how easily she could be among them. Mseluku lived, however. Jeneba heard him groan as his captors carried him under her.

She bared her teeth. "Mala, guide me to vengeance," she whispered at the silver disc of moon rising over the far shore of the lake. "Buffalo, give me your strength and wiles."

The last half-man passed Jeneba's tree. She waited a while longer, then cautiously slid to the ground, never letting her eyes leave the bobbing light of the torches disappearing into the woods. "Jeneba!"

Her heart leaped at the startled exclamation behind her. She

spun, sword in hand and arcing . . . but turned the blow aside to grin at the familiar figure standing in the campsite clearing with moonlight pouring over him. Her spirit soared in relief. "Tomo Silla! Thank the gods and buffalo someone else escaped, too. Come on; let's go before they're too far ahead."

Tomo sucked in his breath sharply and caught her wrist. "Two of us alone can't rescue Mseluku and the others. Find the horses and we'll ride to Kiba for help."

"Leave our people for *two days*?" She stared at him in disbelief. "Why aren't two enough? We're Dasa."

"I'm Dasa."

The words pierced like a spear. Jeneba recoiled from Tomo, snapping her wrist free of his grip. "I'm Dasa, too," she hissed, "and I won't leave my uncle or any of our people for the wachiru to eat!"

Tomo frowned. "They'll be safe for a while. The dead will be eaten first."

She might have been reassured if she had not smelled the acid reek of fear on him. The beads in her hair rattled as she flung her head. "Are you sure enough to stand beside me when I face my mother and aunts and grandmother and promise them for me that their son and brother will still be alive when we return here?"

"Do you really want to rescue our people," he said, "or do you only want the glory of the deed? Heroic effort won't prove you're as brave as a true-blooded Dasa or cause the bards to make songs about you. Perhaps you can escape the demons and spirits roaming the night, dark being your father's element, but you can't defeat that many wachiru. You'll only become an object lesson in false pride, the warrior who cost an entire army its life."

An animal snarled in Jeneba. She longed to spring at Tomo with her sword. She fled, instead, bolting after the distant sparks of the wachiru torches, horrified and shamed by her savage desire. Bitterly, she wondered if Tomo were right. Maybe she was acting for self-seeking reasons, and perhaps she must fail. If Tomo Silla, a hero of Kiba who had faced countless Qeorou and Burdamu in single combat, was afraid, there must be good reason. Thinking of the host of demons and spirits that owned the world at night, the skin on her spine ran with fire and cold.

Jeneba welcomed the fear, though. It blunted her anger and hurt. Her mind steadied as nerves pulled taut, stretching awareness into the night around her . . . to shafts of moonlight pouring through the trees to turn the woods into a great palace hall supported by silver pillars, to wild buffalo and eland drinking at the

lake shore, to night birds singing in the trees and lion roaring and hyena whooping out in the grasslands. The carrion odor carried back from the wachiru ahead. And testing the night, Jeneba's thoughts churned. A warrior must fight with honor. It meant more than victory itself. However, would Mseluku and the warriors care why she rescued them, as long as she succeeded? Honor could be debated in the safety of Kiba's walls.

Footsteps ran behind her. Jeneba's heart caught. Was it a no-gama, ready to slash her with its clawed palms . . . or the spirit of some dead ancestor, demanding gifts to sustain its existence? Fearfully, she risked one glance back . . . and let out her breath in relief. Tomo Silla. Then anger replaced relief.

"Have you lost your way to Kiba?"

The whites of his eyes glinted as he glanced toward her in the dark. "You represent warrior-honor poorly, sister, to speak with such disrespect to a hero who has contemplated your words and concluded that you're right: being Dasa, we *can* rescue our people from the monsters."

Warmth flooded her. Sister. Our people. Despite his fear, he would still run through the night with her and face the wachiru? That was heroism indeed. She instantly regretted her anger. "Please forgive my words, Tomo. I spoke unfairly, in haste and ignorance."

He grunted acceptance and they fell silent as they ran together behind the wachiru party, watching both the torches and the shadows around them, alert for anything not plant or animal.

Jeneba wished that the carrion smell were less strong, so she could smell any demons approaching. Still, that scent had been useful. Without it, she too might be among the dead or captives. Somewhere in the woods a leopard screamed and the sound brought an unbidden thought: if she had only a human nose, she might never have noticed the carrion smell until too late. Mere human hearing would not have heard the wachiru footsteps, either, and now, night vision helped her find her way and search the shadows for demons. Hastily, she looked for something else to think about.

"Tomo, why do you think the wachiru attacked this way? All the stories say that one man meets one half-man who challenges him to wrestle, not a group that attacks with clubs."

"I don't know." Tomo's whisper hesitated. "Things . . . change. The seers tell us that many things are changing, that the Sahara is drying up and that the grass will disappear one day, that the wild buffalo and sheep and our cattle will die. They say sand will

cover not only Kiba but great cities like Yagana and Kouddoun. The wachiru must be changing, too."

Ahead, the line of half-men scattered. Jeneba caught her breath. The village! She stopped caring about everything except reaching Mseluku and the warriors. Slipping from shadow to shadow, she and Tomo worked their way to the edge of the village, where they climbed a tree for a better vantage point and sat in a fork with backs pressed against rising branches.

The village consisted of two concentric circles of mud-and-grass huts protected by no walls or watch dogs. Entering it should be easy, then . . . except that the captives had been taken to the open center and hung by their wrists or ankles from racks there. She and Tomo would have to walk into the very middle of the village to reach them.

"We can keep in the shadows," she said, "but do you know any way to tell if a wachiru is watching us with the off-side toward us?"

A leopard screamed off toward the grasslands, answered by a howl neither animal nor human. Tomo's eyes glistened as he glanced over his shoulder, fingering the hilt of his sword. "This is madness. No one would bother saving you if you were hanging from a wachiru meat rack."

Jeneba sucked in her cheeks. Probably, except that she hoped Mseluku would try. Still, in any case she had a duty to them. They were her people. "Wasn't it madness when you rode into combat with the Burdamu outlaw chief Utsaba Akaha with no spear, sword, or shield, only a hobble rope, to show your contempt for him? These are your people, too, and they *would* try to save *you*."

He bowed his head. "Of course you're right. We'll wait until the village is asleep, then slip in and cut everyone loose."

She settled back in the tree fork to wait.

Not that it was easy. They had to watch the dead warriors disappear into wachiru maws, eaten raw. Jeneba's fingers bit into the hilt of her sword in her longing to use it on the wachiru. Only self-discipline kept her silent while the half-men finished their hideous meal and disappeared into their huts. Only when the village lay quiet did she and Tomo swing down from their perch and stand at the tree's bottom flexing stiff, numbed limbs until feeling and function returned.

"You have the best night vision," Tomo whispered. "You go first. I'll guard your back."

Jeneba nodded. Sword in one hand, the other gathering her

tsara snugly around her hips to keep it from snagging on something that might betray her to the wachiru, she slid from the deep shadows beneath the tree and across a pool of moonlight into shadows again beside a wachiru hut. She had to crouch to keep her head below the level of the roof. The stench of carrion almost overwhelmed her. She listened for sounds of wachiru still awake, but heard nothing and raced forward, across the space to the inner circle of huts. There she paused again and glanced back.

Tomo crouched beside the hut she had just left. He waved his sword at her encouragingly.

Breathing deeply, Jeneba faced the village center. She could reach the nearest warrior in a few strides. Nothing lay between her and the racks but space . . . space without any cover, faced by every hut in the circle, and flooded with moonlight.

She sucked in her cheeks. "Mala, Creator, please hide your face. I need darkness for safety."

But Mala ignored the whispered prayer. The moon remained full and bright.

Jeneba sighed. So be it. She located Mseluku across the circle from her. He must be freed first, however great the danger in reaching him. Glancing backward toward Tomo one last time, she took a breath, prayed that wachiru slept deeply, and sprinted out through the circle of racks. Her bare feet made no sound in the dust.

"Jeneba!" someone hissed in surprise.

She paused only long enough to press her fingers across her lips before racing on to where Mseluku hung tied, his feet barely touching the ground. Jeneba smelled fresh blood where he had been working his wrists against the bonds holding them to the overhead bar of the rack. His eyes widened at the sight of her, but he said nothing, only strained to give her room to slide her sword between his wrists and the bar.

"When I cut you loose, run for the woods," she breathed in his ear.

He nodded.

She sawed at a strap. It was tough leather, well-tanned. It gave way with agonizing slowness. One of Mseluku's wrists finally came free, however. She was starting on the other when a whoop of alarm tore through the night air. Jeneba abandoned caution to swing the sword overhead like an axe and chop at the strap around the crossbar. "Follow me, uncle; we'll come back for the others later." She bolted for the space between the nearest huts.

A wachiru leaped into her path. She cut him down with a sweep

of her blade and jumped his writhing body. A second half-man appeared out of invisibility, and a third, catching her tsara. Slashing their arms, she tore free of those, too. Then she was between the second row of huts and into the woods.

She looked back for Mseluku, but to her horror, could see him nowhere. A handful of howling wachiru followed her instead, covering the ground in incredibly long hops.

The blood went fiery cold in her veins. Jeneba stretched into the long-strided run the warriors practiced every day along with wrestling and swordsmanship. Her pursuers did not fall behind, though. They gained. When they were far enough from the village that the wachiru could not expect endless reinforcements, she would turn and fight, she decided.

But in the next stride, pain shot up her leg and she crashed forward over a root. Somehow Jeneba kept her wits enough to curl and use her momentum to roll into a somersault that carried her forward back onto her feet with almost no break in stride. She forgot to hang on to the sword, though. It sailed out of her hand and off into the brush.

"Buffalo, give me your strength and speed," she called. There could be no fighting now. She would have to depend on outrunning her pursuers. If she could. The wachiru were so close now that she could hear the rasp of their breathing.

Movement flashed on the edge of her vision. Jeneba dodged away. The wachiru followed her evasion, however, and a thunderous heartbeat later pain ripped through Jeneba's scalp. The wachiru had caught her by the hair. Shrieking, she jerked upward, off her feet.

Worse pain followed. The wachiru turned back toward the village without slowing. Pulled off balance, Jeneba dragged behind him. Pain lanced up her nerves from skinned knees and palms. Still screaming, she clawed at the wrist and fingers wound in the long cords of her hair, but his skin felt as impervious as bridle leather. He appeared unconscious of her nails. His speed made it impossible for her to bring her feet under her, either. Her legs continued to drag, the brush and stones tearing at them, while at every leap, her hair felt as though it were being jerked out by the roots.

Ahead, his brother and sister wachiru whooped and gibbered. Visions of being strung up to await dismemberment, never to see Kiba or the beautiful Sia Nyiba again, filled Jeneba with terror. Her mind raced. There must be some way to break loose from the half-man. There *must* be! If only she could regain her feet!

Feet. The word echoed in her head. Gritting her teeth against the pain in her scalp, she twisted to take a sight on the muscular leg moving ahead of her. Reaching out, she locked her fingers around the wachiru's ankle.

He crashed full length to the ground. Before he or the others could react, Jeneba tore free from his shock-loosened fingers and fled back into the woods. The wachiru whoops of triumph changed to furious howls and the entire group bounded after Jeneba.

But then another cry sounded, an animal scream, answered by wachiru cries of dismay. Jeneba looked back to see a leopard crouched in the path behind her, facing the half-men with bared fangs and lashing tail. The wachiru retreated toward their village.

Jeneba sagged gasping against a tree.

The leopard swung around to face her, blinking slowly. "That's twice I've saved you, sister."

"I'm not—" Jeneba stopped. "Twice?"

"The first time when the wachiru attacked."

"You didn't—" But in all fairness, she had to admit that of course he had . . . not giving her specifics of the danger, perhaps, but certainly alerting her to its presence. "I thank you, leopard." She gulped air. "Why did you?"

His tail twitched. "Balance. You risk your life to save those who refuse to accept you as fully one of them, so Mala-Lesa asks that I intervene for a sister who does not acknowledge her kinship to me."

"Then I thank Mala-Lesa, too." Jeneba slid down the tree to sit on a root. "I hope Tomo escaped."

"If you were my sister," the leopard said, "I could tell you about Tomo."

A sudden cold washed through Jeneba. He had used that same tone before the wachiru attacked. "What about Tomo?"

The leopard's eyes flared. "But you aren't my sister."

"I—" She almost choked on the words, but she reminded herself that she needed his knowledge, however she had to obtain it. "I am your sister."

The leopard sniffed. "Words. Very well, though. Tomo Silla was never in danger. He remained by the outer ring of huts and when he gave the alarm, imitating a wachiru call, he escaped into the woods before anyone ever saw him."

Jeneba stared, shocked, then scowled in disbelief. "That's impossible!"

The leopard's tail lashed. "As you wish." He turned away.

She scrambled to her feet after him. "Why would Tomo give the alarm?"

The leopard looked back over his shoulder. "He couldn't let you free the warriors. They were the price of his life."

Understanding flooded her with the force of someone striking her in the stomach. Pain thinned her voice to a choked whisper. "The wachiru aren't changing. Tomo met one when he was scouting for the campsite, didn't he? It challenged him to wrestle as wachiru always do, and he lost."

"Yes," the leopard said. "But he bargained for his life."

Jeneba could understand why. She still felt the terror that had filled her as the wachiru dragged her back to the village. Tomo's choice of bargains outraged her, though. "He offered to trade *all* our lives for his?" How could a true-blooded Dasa, especially a noble and hero, so betray his people? No wonder she had smelled fear on him when she insisted on rescuing Mseluku and the warriors. She set her jaw. "Where is he now?"

"Hiding in the woods."

Waiting out the night. When morning came, no doubt he would set out for Kiba, to carry the story of how everyone but him had been tragically lost. As soon as the warriors were safe, she would find Tomo and challenge him to combat.

She retraced the path of her flight until she found her sword.

The leopard followed. "So you still believe you can rescue the others?"

"Of course."

At the edge of the village her confidence faltered. The half-men were stationing guards around their captives. Still, perhaps something might be done after they stopped checking their captives' bindings and the village went back to sleep.

"Could I persuade you to help me, brother?" she asked the leopard.

His eyes glowed. "Ah. Now that you need me, you call me brother."

Guilt spread heat up Jeneba's face. "I need you. Will you help?"

"If you were truly my sister, I could tell you how to save them."

She leaned toward him, heart leaping in hope. "Then there is a way?"

The glowing eyes met hers. "I give you this much, stubborn sister. The sword is no use. The men must be won as they were lost. You may prevail if you become truly the leopard's daughter and use a thing born of Mala-Lesa, who sees wachiru when men cannot."

With a lash of his tail, he vanished into the darkness, leaving Jeneba staring in dismay. The leopard advised in riddles. What help could that be?

Part of the answer posed no difficulty. Winning the warriors as they had been lost meant by wrestling. Winning was the problem. Tomo, stronger and more experienced than she, had lost. How could she become any more the leopard's daughter than she was now, and more puzzling yet, what was this something born of Mala-Lesa? Since the high god had created the entire world, that could be anything. How could she use it in wrestling, anyway?

Shrieks of wachiru glee mixed with protesting human cries interrupted her thoughts. Jeneba whirled toward the village, and instantly forgot all about the leopard and his riddles. The half-men had discovered Mseluku's severed bonds and were dragging him toward the place in the center where earlier they had used captured knives and swords to butcher the dead warriors. A wachiru man waited with one of the swords.

"Uncle!"

The cry echoed through her head but she was not aware of screaming it aloud, or of moving, until she found herself in the center of the village charging toward the group holding Mseluku. As reason reasserted itself, she stumbled and froze. Around her, shock paralyzed the wachiru, too, but that would not last long she could tell. Even now their mouths were opening to cry in warning and their hands spreading into claws. The half-man with the sword raised it like a club.

Jeneba acted quickly. A sword was useless, the leopard had said. Turning the blade, she drove it into the ground at her feet, then she spoke loudly in Burda, the trade language. "It is the custom for wachiru to challenge men to wrestle. Now a man comes to challenge the wachiru."

"No," Mseluku gasped in their own language, Dase.

Wachiru eyes glittered in the moonlight. "To wrestle?" one asked in a voice deep and hollow as though coming from a cave.

Jeneba locked her knees to keep them from trembling and gestured at Mseluku and the warriors. "Yes, if they are the prize."

A hiss of Dase ran around the circle. "Half-blood fool. Why didn't she go to Kiba or an ally's village for help?"

Wachiru heads shook. The deep-voiced one said, "No."

Jeneba stiffened her entire spine and forced her voice louder, despite a drought-dry mouth. "You have no right to them, anyway. Tomo Silla dishonorably gave them to you in return for his own

life after you defeated him." She ignored the Dasa hisses of disbelief to watch the wachiru spokesman. "Pick your best wrestler to answer my challenge."

The spokesman turned away, vanishing. She heard his voice, though, talking at the other half-men. They gibbered back shrilly.

Between his captors, Mseluku said, "Jeneba, this is madness. You can't win. You'll be eaten like the rest of us."

The cold creeping through her bones agreed with him. She could win, the leopard said, but . . . what could the answer to the riddle be? She sighed hopelessly. She would never guess; there were too few clues!

The wachiru spokesman reappeared. "We accept. I will wrestle you."

Jeneba swallowed. "Shall we meet in the morning?"

His eye gleamed. "We wrestle now."

Now? Her heart lurched. But she had been traveling all day, and fighting the last several, with little rest. She needed sleep. "I'm not ready yet. We must wait until morning."

"Now," the half-man repeated.

"Half-bloods," a warrior sister spat.

Mseluku said gently, "Niece, unlike nobles, wachiru aren't compelled by honor to wait until their opponent is prepared before fighting."

She swallowed again. "May I have a few minutes to speak to my gods, half-man?"

The wachiru considered. "Yes."

Her mind raced. If she could not answer the leopard's riddle, then she would have to fight another way, which meant, first, keeping away from the wachiru. She still felt the grip on her hair as that other lifted her off her feet. She looked down at the sword. Perhaps it could be useful in one way.

While the warriors watched aghast, she pulled the blade free and sawed off the long, painstakingly twisted and oiled ropes of her hair until nothing remained on her scalp but fuzz too short for anyone to grab. Next she untied her tsara at the shoulder and waist and unwrapped it, and likewise removed her gold and silver arm bands. She debated over her talisman but finally decided there must be nothing the wachiru might use for a handhold. She folded it up in her tsara along with her sword and armbands. Finally, she rubbed the shorn ropes of hair all over her, covering her skin with the heavy oil dressing.

After drying her palms in the dust, Jeneba straightened. "I'm ready."

The wachiru bared his teeth, showing fangs.

The other half-men backed toward the racks, pulling Mseluku with them, leaving the center clear of all but moonlight, Jeneba, and her opponent. Crouching, Jeneba warily circled the wachiru, moving toward his arm. He side-hopped a few steps, too, but then spun and vanished. Jeneba froze, holding her breath and sending darting glances around her. Where was he? Her hands felt sweaty and it was a effort not to wipe them on her thighs.

"Behind you," Mseluku called.

An arm closed around her throat. The hours of wrestling practice repaid themselves. Jeneba tucked her chin into the crook of the elbow and grabbing the wrist with one hand and the elbow with the other, pushed up on the elbow, slipping out from under the arm. Rather than release him, however, she held on, moving around him dragging the arm with her until it twisted behind him. She was reaching to hook his ankle with her foot when the wachiru suddenly leaped high into the air, whirling free and vanishing again.

Jeneba glanced toward Mseluku, but other wachiru were brandishing clubs at him and the warriors. "Keep silent."

Her stomach plunged. Without help tracking her opponent, she was lost. If only she could answer the leopard's riddle.

Wait. She held her breath. Was that breathing and a footfall behind her under the gibbering of wachiru? She spun toward the sound.

The half-man arrowed foot-first out of the moonlight, kicking for her stomach. Jeneba leaped sideways, not quite in time to avoid the blow entirely. It caught her with enough force to knock her on her back, gasping for air. She landed rolling, however, and the wachiru, diving to pin her, found only dust.

Jeneba scrambled at him, seeking a hold of her own, but he rolled away, too . . . vanishing yet again. Even so, she jumped to her feet relieved, listening to the hop of his foot. Could that be the answer, using leopard hearing to track him? She would not even have to become less Dasa.

Her ears followed his bounding progress behind her once more. When she turned, however, she realized that that still gave her no indication *how* he would attack. She needed more than hearing.

A shadow flickered over her. Looking up, Jeneba found the wachiru arcing above her, silhouetted against the moon. For a moment, though he was landing on her, she could only stare, lightning flashing in her head. Shadow! Of course! A thing born

of Mala-Lesa, Mala the moon and Lesa the sun, for those bodies of light certainly saw wachiru when men could not!

She flung herself sideways barely in time to avoid being knocked flat.

The half-man snarled at missing her a second time, but he landed like a cat and rebounded straight at her. They went down on the ground together, each straining to find a hold on the other. He was like a snake, either sliding away from her or kicking loose with his powerful leg. On the other hand, her oiled skin gave him no grip on her, either.

Jeneba squirmed free and back-flipped onto her feet to wait expectantly, crouching. Sure enough, the wachiru bounded up, turned, and disappeared . . . except not entirely. A pool of shadow remained. Night sight made the shadow as sharp to Jeneba's eye as though cast by bright sun. She followed the rasp of his breathing, just audible above the noise of her own, and the thump of his foot, but watched the shifting pool where the moonlight did not reach.

He tried circling behind her, time and again. She pivoted, following each of his bounds, evading each tentative move toward her.

The wachiru voices fell silent, except for one which hissed, "Witch!"

Her opponent's voice came out of the air. "Running is not winning."

Jeneba sidestepped another rush. No, it was not. Only pinning won. She might have just one chance at him, though. After that, certain she could see him, he would be prepared for her. Keeping her distance, Jeneba plotted strategy, then took a deep breath and watched the shadow, praying silently to Mala and the buffalo.

The shadow moved, broadening subtly in a way that told Jeneba the half-man was crouching to spin and spring. She moved as he began the turn, leaping forward and catching him around the neck from his off-side. He turned his chin into her elbow as she had done, but before he could grab her arm, she caught his wrist with her other hand and leaned backward.

His spring, already begun, helped her lift him off his feet. The momentum kept them moving. The wachiru cried out, but Jeneba flung them on until her back arched in a reverse bow with her and the wachiru's heads touching the ground behind her.

No sooner had they touched, however, than she rolled toward her arm around his neck and dumped him face-down on the ground. Her arm slid free to join her other hand cranking on his

arm. Her knees landed on the nape of his neck and in the middle of his back.

Beyond them, wachiru voices shrilled again and Dasa voices shrieked in glee. Jeneba barely heard them. Under her, the half-man bucked with a violence that needed all her concentration to fight. She had his arm twisted up behind him, but the muscles in it bulged and rippled until the clay painting his skin cracked and flaked and with agonizing slowness, the wrist started to slip through her grip. She gritted her teeth, hanging on with all her will.

"Buffalo," she whispered, "if you would have me save my people from the monsters, give me your strength."

The wrist writhed, slipping still more, slowly and inexorably straightening, despite Jeneba twisting hard with both her hands.

Sister, the voice of the leopard whispered in her head.

"Be gone!"

Her grip slipped still more.

You must become the leopard's daughter.

The wachiru writhed beneath her. Jeneba gritted her teeth as her fingers began to tremble in fatigue. She could hang on, she told herself. Leopards dragged full-grown bucks up trees. One half-leopard should be able to control a half-man. Her chest heaved with her effort and sweat streamed down her body, yet the wrist continued to slip through her grip.

Sister.

"All right!" She must . . . not . . . let . . . go! She must do anything to hang on, even listen to the leopard. Desperately, she reached inside, searching for whatever made her the leopard's daughter. What had breeding given her . . . night sight, hearing, a sharp sense of smell? What else? She tried to imagine how it might feel inside a leopard skin, moving on all fours, racing after game, clamping her jaws on warm throats, tasting blood.

And suddenly she felt it *all*. Exultation exploded in her. This was being leopard? She had known moments when her body felt obediently under her command, but . . . *this*! It was fierce joy in being alive, pride in pure existence! Was this what Sia Nyiba saw in her lover?

Jeneba felt molten in her grace, sinuous and lithe, body flowing in sustained perfect obedience to her commands. She rode the writhing back with new and confident balance. The wachiru could have broken loose and she could recapture him in a heartbeat, she felt sure.

Grinning, she crooked her fingers. Her nails dug into the half-

man's leather-tough hide. The slipping stopped. Jeneba applied new pressure, twisting the arm, forcing it farther and farther, until the shoulder joint grated and popped with the strain.

The wachiru screamed, "I yield!"

Jeneba purred in his ear, "Order your people to cut mine loose."

Minutes later Mseluku and the warriors were all free. They lost no time leaving the wachiru village. Jeneba marched up front with her uncle, settling her tsara around her again, fingering her talisman. She would have to acquire a new one, she decided, something to reflect her tie to the leopard.

A brother and sister warrior edged up behind her. "We salute you, sister. It doesn't matter that you're less than true Dasa; you have a Dasa soul and you're a Dasa hero."

Jeneba jerked around indignantly toward them. *Less* than Dasa? What conceit. She was *more* than Dasa! But she smiled a moment later in amused resignation. "Thank you."

They would never understand, she knew. After all, until the leopard burst free in her, had she not also thought nothing could better being pure noble and Dasa? But let them treat her as Dasa and a hero; it would be a pleasant change. She would secretly enjoy her new pride in being the leopard's daughter, and after they reached Kiba and Tomo Silla had been dealt with, she would tell her mother everything. Sia Nyiba could appreciate it. ●

MARTIN GARDNER

(from page 41)

SECOND SOLUTION TO PRECOGNITION AND THE MYSTIC 7

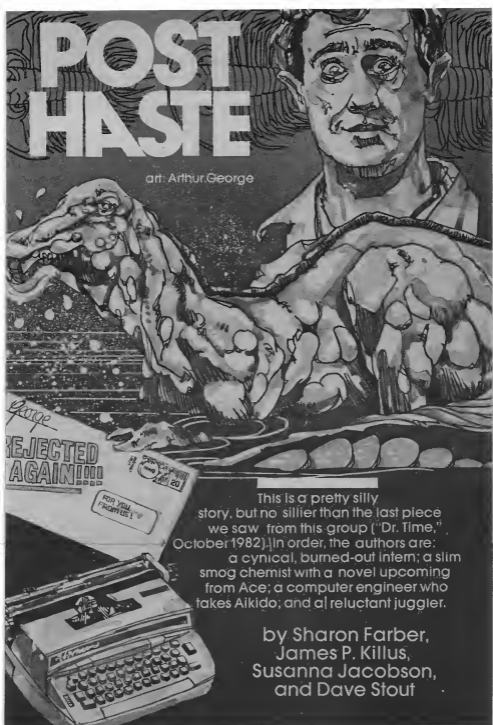
The decimal remainder will be a stutter of 7s.

I'll explain this in part. If you rearrange the digits of any number to form a second number, and take the smaller from the larger, the result will always be a multiple of 9. You were told to subtract 2 from such a multiple. The result, therefore, is sure to be a number with a remainder of 7 when it is divided by 9. The fraction $7/9$ in decimal form is .777777

Our final trick is a truly astounding feat of precognition. Think of any word. Write it seven times on a sheet of paper. Fold the sheet in half and sit on it. Now turn to page 174. I'll not only tell you what's on the paper, but I'll also tell you where you got those shoes you are wearing.

POST HASTE

art: Arthur George



This is a pretty silly story, but no sillier than the last piece we saw from this group ("Dr. Time," October 1982). In order, the authors are: a cynical, burned-out intern; a slim smog chemist with a novel upcoming from Ace; a computer engineer who takes Aikido; and a reluctant juggler.

by Sharon Farber,
James P. Killus,
Susanna Jacobson,
and Dave Stout

Buzz awoke to rain spattering against the window.

"He heard the rat-tat of the water on glass, timid but insistent, like the fingernails of a hundred hovering ghosts begging entrance . . . Oh, hell!" Interrupting his metaphoric interlude, he leapt from bed to stare out at the rain-drenched street.

"Did I roll up the windows?" He'd parked three blocks away. In the best of all possible worlds one would be able to park right outside one's apartment.

Crawling back into bed, Buzz mused on the local paucity of available parking. "None in space, but in time . . ." Sure! There was never a parking place right outside his door today, or even ten years ago, but taking the cosmic view, millions of years of potential parking had existed in that very spot.

Within the hour he'd plotted a story about mysterious people who would park your car in the past. A hard-boiled but winsome detective, sort of like Rockford—Buzz decided to call him Stonecar and hoped it wasn't too blatant—becomes curious when his car comes back covered with brontosaur droppings, and with the battery dead and trilobites stuck in the radiator grill. He finally learns that punks from the future have taken jobs in the present as parking lot attendants. They like radio static—it's the indigenous punk art form of the future—but all the good wavelengths are occupied by radio stations so they have to go to the past.

Buzz rose, made some coffee and sat down at the typewriter. "This is a winner," he thought. Then he heard the tread of earth shoes on the hall linoleum.

The mailslot clinked open and a shower of letters hit the floor, a large manila envelope catching in the slot. He tore it open and pulled out a piece of letterhead stationery. *Prognosto Science Fiction. "Real Stories About the Future Today."* He didn't remember having any manuscripts out to *Prognosto*, but the self-addressed stamped envelope was in his handwriting. And Buzz always sent his stories to *Prognosto* first, even though they were famous for not printing what they bought, leaving your story in literary limbo; they paid well enough to make that risk worthwhile.

Dear Mr. Bailey:

Your current submission "Unlimited Valet Parking" does not meet our editorial needs at this time or in any conceivable future. In accordance with our policy of encouraging only the best in science fiction, we are returning your manuscript.

*Sincerely,
Illegible Scrawl
Editor*

"What the . . . ?" He tipped up the envelope. Ashes spilled onto the floor.

Having one's stories rejected before they are even written might deter the ordinary sort of author, but not Buzz Bailey. While walking in the park a week later he came upon a young woman feeding the ducks. Her halter top and jogging shorts were as revealing as any comic book barbarian's armor, and the casual way she was backhanding the bread crumbs made him think of samurai throwing ninja stars.

"Nice day," he ventured.

"Yeah?"

"Did you know that birds are modern-day dinosaurs?"

"As a professor of paleontology," she replied, "I find that a very simplistic description of a complex phylogenetic issue." She tossed the last crumb and left to teach her proseminar in Continental Drift while Buzz rushed home, fingers itching for the touch of the keys. His mind danced with the image of a massive Allosaurus, its feathers cardinal red, threatening a spunky, sword-swinging woman.

His feet trod on the day's mail: the phone bill, Save the Nine-Banded Armadillo Foundation (29 percent of all armadillos in Louisiana have leprosy. Only your tax-deductible dollars can buy medicine to save them from this crippling and tragic disease), a letter from his mother (complaining that he hadn't written to acknowledge the last letter she'd written complaining that he hadn't written) and *Prognosto's* rejection slip for "Empress of Gondwanaland."

"Damn," Buzz said, and sneezed. He was allergic to ashes.

The Serbo-Croat Film Festival was a turkey, but he did run into an old friend who invited him to a party. It was a Sixties revival party, and Buzz had been there for about an hour when he realized that he should not have sampled the punch.

"Uh, excuse me," he said to the host. "The . . . uh . . . punch. Is it . . . ?"

"Of course," the man replied, his Carnaby Street wide paisley tie vibrating in time to the dulcet tones of H. P. Lovecraft (the group, not the writer). "Do you know how hard it is to find good LSD these days?"

"I imagine," said Buzz. He wandered off into the psychedelic fog. "Dosed without my knowing it," he muttered to the very interesting floral design on the wallpaper. "How long has it been

since *that's* happened? I wonder though—suppose I hadn't actually taken any drugs, at least *not yet*?"

He spent the rest of the party scribbling little notes to himself on cocktail napkins and stuffing them into his pockets.

The next morning, while sorting through the detritus in his bulging pockets, he managed to put together a rather chaotic outline for a story about a hallucinogenic drug that works backwards in time. It begins to affect you about eight hours before you take it, with the hallucinations reaching a peak about an hour before ingestion. A small fraction of users can't stand the trip and commit suicide before they even take the drug.

He walked over to his typewriter and sat down, fingers poised, gazing expectantly at the mail slot. Nothing fell through. "The mailperson must be late," he said.

Slowly he typed, "Now is the time for all good men to party." Still the mail slot grinned malevolently.

"This can't go on," he said.

He drove to the *Prognosto* office building, its cement and glass edifice implying a sturdy financial foundation.

"Park y'r car, man?" asked the stoned-looking kid at the valet stand.

"Yeah," he answered, then yelled "YEAH!"

"Damn Sony Walkmans," Buzz thought as the message soaked through to the kid's brain. "He'd better pay as much attention to my fenders as he does to that music."

He bulled his way into the editorial offices.

"Let me see the editor. I've got a complaint."

"I'm sorry," the secretary said, "but Mr. . . ."

Suddenly the intercom squawked, "Ms. Mumblegrump? Is Buzz Bailey here yet?"

"That's me!"

"He just arrived, sir."

"Well, send him in."

Bewildered, Buzz let the secretary usher him into the inner office, let his hand be shaken by the editor.

"Mr. Bailey—it's a pleasure to meet you." The man smiled. If he ever stopped editing science fiction, he could have a fine career as poster boy for the American Dental Association.

Buzz took a deep breath, fighting the force of an almost inhuman charisma. "Look," he said. "This has got to stop."

"Eh?"

"I can't keep getting stories rejected before I've even written them, let alone submitted them."

The smile clicked off. "Give me the details." Buzz told him about the letters and the ashes. The editor shook his head and walked over to a computer terminal. He punched a few buttons, read a few lines of what seemed like incomprehensible gibberish, and scowled.

"I'm sorry for any inconvenience this may have afforded you, Buzz—may I call you Buzz? It seems that someone in the corporate structure has been exercising an authority far beyond his station. An *editorial* authority, at that. We'll make sure that it doesn't happen again. And while you're here, we owe you for your story."

"Story?"

He handed Buzz a check, put an arm about his shoulder, and walked the stunned author to the door.

"This is . . . this is . . ." Buzz said. He couldn't believe the amount on the check.

"I don't usually care for drug stories, but 'Palmer Eldritch Died for Your Sins' is worth every penny of that check. Good meeting you, Buzz. Try us again, especially with a sequel."

"But," began Buzz. "How do you . . . how did you . . ."

The editor looked at Buzz with perfect, steel-gray eyes, and smiled. "Don't ask," he said, closing the office door.

As Buzz stumbled away he heard the editor's voice on the intercom.

"Ms. Mumblegrump? Fire the mailboy."

The harsh sunlight made his eyes water. "I sold a story!" His car was at the curb; the valet was nowhere to be seen, but his Walkman was dangling from the valet parking sign. Buzz could hear static coming from the earpieces.

He opened the door and said "Oh, hell." He hadn't bothered to roll up the windows—it was a sunny day. But the front seat was soaked. A trilobite stared up at him from the upholstery.

Buzz threw the arthropod onto the street. "From now on," he said, "I'm going to write mysteries." Already a vague plot concerning a locked room and a famous mystery writer was beginning to form. ●





art. Judy Mitchell

THE RIM OF THE WHEEL

by Lillian Stewart Carl

The author lives in what she calls the "suburban wilderness of Dallas, Texas," and works primarily as a domestic engineer for her husband and two small sons.

She's been a librarian, engineering aide, newspaper columnist, and college history teacher as well.

Her first professional sale was to the *Amazons II* anthology; since then she's sold to *Amazing* as well as to *IASFM*.

We hope to see more from her soon.



"Look upon it as an adventure," she said. "Maybe this dust we're breathing contains some essence of Alexander, the beauty of Mumtaz Mahal, a few molecules of Gautama Buddha's physical body—"

Richard reached into his bag and pulled out his light meter. Frowning, he glanced from it to the elephant pacing with ponderous grace just outside the window of the car. The gray bulk was somehow insubstantial in the dusk, the children that sat on its back only blots of shadow.

"Too dark," he said, and he thrust the meter back into the bag. "If we were on schedule—"

"Try to enjoy yourself," she said between her teeth.

"Sharon, I'm on assignment. I'm taking pictures of India on assignment for the Foundation. And we're not going to get to the Foundation guesthouse in time for me to do any work tonight."

She closed her eyes and for a moment succumbed to weariness. It would be so easy to sleep, to surrender to a dream— She opened her eyes and focused on the intricately folded turban of the Sikh driver.

"Mussoorie has been there for a long time; it'll still be there tomorrow," she said, trying again. "You know, I'm from Mussoorie and you have to show me—"

His snort was humorless. With a sigh she turned to stare at the crowds thronging the street. The stench, the dust and smoke eddied in slow whorls through the window, coating her skin with sludge. Her hair straggled in annoying damp ringlets across her forehead. A beggar, a shapeless heap of rags, thrust a scrawny hand into the car and whined some incomprehensible Hindi epithet.

The Sikh accelerated, following the car ahead. "Shouldn't you turn on the headlights?" Sharon asked faintly.

The turbaned head nodded. "So sorry. Lights not working. Following car ahead, you see."

"That figures," Richard groaned. "Car broke down three times. Waited in Saharanpur for hours with a bloody flat tire, shut up in a bloody hot car with beggars like vultures waiting—"

In Tibet, Sharon thought, the vultures are sacred. The Tibetans practice celestial burial, dismembering the bodies of the dead and feeding them to the carrion birds, freeing the soul for reincarnation, another trip around the wheel of life— Her neck crawled. Stop it, she ordered herself. Stop it. Surely here, on the other side of the world—

"That's India for you," she said, with a brittle brightness. "No

parts for the cars, no one to fix them. The locals have learned acceptance, I guess. But we're almost there, and dinner'll be waiting."

Richard muttered skepticism. The dusk thickened. The city of Dehra Dun dematerialized behind them. The driver turned at a fork in the road, following close behind the tail lights of another car. And there, suddenly, were the mountains that had all day receded before them, a mirage closing the edge of the Punjabi plain.

These were only the foothills of the Himalayas, but to Sharon's Midwestern American eyes they were themselves mountains. At the top, where the basalt cleaved the sky, flickered rows of yellow and white lights like Christmas decorations on some unimaginably tall tree.

"Mussoorie," the Sikh announced, pointing. "Up there."

Between here and there were strung tangled lengths of gray thread, twin headlights crawling around an acute angle— The road. They were going up the road, in the dark, without lights. Sharon gulped and leaned back against the seat. Look upon it as a change in perspective, as a chance to get away from teaching World Civ to kids who cared only about their cars, as an opportunity to observe Richard in his natural habitat and not in the artificial light of a suburban fern bar—

When he'd asked her to come to India with him, she'd jumped at the chance, hoping to escape the black disillusionment that had been haunting her. But she carried it with her, it seemed.

The car swung to the right. Sharon was pulled to the left, toward the window, and she looked in reluctant fascination out and down. The last glimmer of the sun lingered over the Indian plain, tinting its pall of dusk and smoke with an ironic rosy pink; a new moon floated just at the horizon. The sky overhead was a crystalline indigo, holding one bright star.

The car swung back in the other direction and approached even closer to the non-existent shoulder of the road. Headlights flashed by on the inside lane. Sharon's face was drawn by some centrifugal force into a grimace of fear, lips tight, eyes wide, as if she no longer inhabited her own body. Shapes swirled in the gloom beyond the edge of the precipice, great carrion birds slipping through the air, eyes glinting. From their beaks trailed—bits of fabric, pale silk scarves—

She blinked. No, no birds. Ancient dust in her eyes; taut nerves and a moment of dream. Richard huddled silent at the other end of the seat.

Half a lifetime later the cars emerged from the road and stopped on a wide ledge in the hillside. The yellow and white lights danced and sparkled at the top of a cliff scaled by a rickety stairway.

Sharon shook off her malaise, opened the car door, found that she could still stand erect. The air she gulped was cool. Wordlessly she accepted one of Richard's camera bags.

The car ahead disgorged an Indian family, children looking curiously at the Americans. The sari-clad matriarch gestured into the gulf of darkness below them, indicating anything from the parking lot itself to a distant glimmer that could well have been New York, pointedly ignoring them. A swarm of dark figures eddied around the cars, their heads barely reaching Richard's shoulder; a few coins changed hands and the figures began to lash suitcases and boxes onto their backs.

"Like pack animals," Richard said under his breath, counting his change.

"I'm sure," retorted Sharon, "that they're poor just to spite you."

He turned to her, brows slanted. "Hey, I know I've been acting like a real bastard today, but can't you give me credit for a little compassion?"

The Sikh driver disappeared. The Indian family straggled up the staircase. Sharon stared at Richard, open-mouthed. He was always doing that, surprising her with understanding when she anticipated a shrug of indifference—but then, he was probably just some fragment of her fevered imagination, some dream of peace and acceptance—

The hand he planted firmly in the small of her back was real enough; he urged her into motion, and she shut her mouth and moved.

The lights swung like banners in the wind. Beyond them was a gravel path. Fir trees arched overhead, their needles the delicate brushstroked patterns of a Chinese block print. The sky grew hazy, softening the stars to milky glimmers; the moon disappeared over the western rim of the world.

"No cars allowed," said Richard. "We walk." The bearers pattered away with the luggage, winking from one pool of lamplight to the next and the next, dwindling into a point of perspective like a singularity in spacetime.

"I could use a walk," Sharon said.

Richard took her hand, offered her a faint smile. "Are you all right? I'll try to behave myself—"

She squeezed his hand. "No, it's not you; it's never you."

"Culture shock, this time?"

"I suppose so—" But she said to herself, I wish it were that simple.

Swift, deliberate footsteps crunched from behind. Sharon tensed, pulling Richard to a halt in the stark white glow of a streetlamp. A Buddhist monk, his bald head shining, his orange robes drained of color by the harsh light, strode by them and paced on into the night. His eyes blinked, once, to register their presence. An odor of incense remained briefly in the bubble of light and then dissipated.

Sharon exhaled, suddenly dizzy, slipping down the smooth slope of a wave— She set her teeth against the plunge.

Richard guided her back into shadow. In a few moments a long red and white house appeared, nestling into the side of the hill; the path was at the level of its second story, and a bridge led onto the veranda. The windows were dark and cold. "Dinner'll be waiting," muttered Sharon. "Figures."

"They never got the message we were coming," Richard groaned. "At least we have a key, and our own food."

Dinner was cold, tough sandwiches of some unnamed meat, cold hard-boiled eggs, packaged cookies and Kool-aid. Sharon forced it down, telling herself that her body needed fuel, too dispirited for appetite.

The bedroom was spartan. Tile floor, bare walls, ancient creaking bedstead. The bathroom would have served as a meat locker. The bottom of the dresser drawer was lined with a yellowed sheet of newspaper; the headlined story was about a plane crash killing a group of Indian generals. A small patch of print in the corner casually mentioned that U.S. President Kennedy had been assassinated. And so much for that, Sharon told herself. She slammed the drawer on it.

She huddled mournfully under the clammy sheets, hating Richard for falling so easily into sleep. Her nose dripped and she mopped it with one of her precious store of tissues. The change in altitude was as good as a change in climate—a change in perspective—what did she think she would find here—heading East like an aging hippie searching for an enlightenment not found in a college class in transcendental meditation—release from the cosmic merry-go-round, the wheel of life and rebirth—Nirvana gained by renunciation of desire—a desire for purpose, for warmth—some Tibetan monks could raise their body temperature through meditation—in this climate they would need such an ability.

The bathroom light emitted as much wattage as a firefly, but

she had kept it on. The wind from the Himalayas tapped at the windows. Shadows moved in the hall, murmuring in a mysterious language. Slow footsteps, felt boots, passed along the terrace outside.

Sharon clasped herself as tightly as possible to Richard's familiar body.

She couldn't have slept. But evidently she had, for she awoke from a dream of bright-colored banners streaming in a wind to hear running feet, shouts and explosions on the terrace. A Red Chinese invasion—she leaped up.

Richard stood at the window, outlined in pale sunlight, laughing. "Look. Monkeys came up on the terrace looking for food, and the servants are using cap guns to drive them away."

"What? Oh—" She looked out. The missing servants had appeared, and they were conducting their defense against the local macaques with great relish. Only the tops of trees showed beyond the low stone wall edging the terrace; brown shapes bounded from branch to branch, chattering with eerily human laughter, and the foliage waved. It was absurd, and Sharon laughed too.

One of the servants turned and saw the couple at the window. White teeth sparked beneath a swooping black moustache. "Good morning, Memsahib," he said.

Goodness, she thought, did they still talk in such a Colonel Blimp idiom? Or was the man making fun of her?

"I smell food," Richard stated. "Let's get dressed."

Sharon stood cradling a hot cup of Darjeeling tea, leaning against the window in the upper hall and rather enjoying the melancholy induced by a change of season—or climate, in this case. Yes, it was an adventure. Her dark dream of the night before was just part of her recurring nightmare, her disillusionment with her world. To a Buddhist, she thought, the world is a dream, shaped by the perceptions of the participant, neither real nor unreal.

They had come up the Indian side of the ridge where Mussoorie was built; this morning she had a view over the other side, to the north and east. Brown hills matted with mist climbed to a beetling smudge, a suggestion of mountain peaks. The sky seemed to flow away behind soft wind-borne clouds, as if the earth turned perceptibly before her eyes.

And there, on one of the trails that laced the hills, a caravan picked its way upwards. Yaks pulled a cart with a crimson canopy; outriders on horses held streaming banners. The figures were

tiny, distant, immaterial—a ray of sun struck them and their robes glinted with blue and silver. Was it a living person in the cart, or an image lacquered in gold?

Even as she watched, the mist gathered again around the yaks and the cart and the horsemen; they crested the hill and were gone. To the roof of the world, Tibet, the Forbidden Kingdom, timeless Shangri-La. *This center of heaven*, went a sixth-century poem. *This core of the earth, this heart of the world fenced round with snow—*

Richard was standing at her shoulder, looking at her doubtfully. He held that infernal British invention, a toast-rack, between thumb and forefinger. "I guess they ate cold toast every morning," he said, "to make them mean enough to rule the Empire in the afternoon."

There is some corner of a foreign field that is forever England;—this little world, this precious stone set in the silver sea—

"Sharon," Richard said, "would you care to join me for breakfast?"

She shook herself. "Sorry."

But his smile was quite gentle. "More tea, ma'am?" He filled her outstretched cup and said, "I thought we should begin with the Tibetan school. Refugee children; the Foundation wants pictures for its journal."

"Oh yes, we hauled those magazines all the way from Delhi for them. Certainly." The tea left a faint herbal tang in her mouth. A cloud brushed the window pane with mist, making of it a steel mirror; she grimaced wryly at her reflection. Taking yourself seriously these days, aren't you?

It wasn't quite her own face that grimaced back.

Sharon crunched along the gravel path, carrying the back issues of *National Geographic* and *Smithsonian*. Richard was just beyond the guesthouse bridge; he had spotted a tiger skin staked out on a rooftop just below. He was crooning contentedly over his cameras and lenses, taking one picture in thin sunlight, another as a cloud tripped over its own shadow and fell against the ridge, spilling water vapor across the town. "Think you'll do any good with that thing?" he called, seeing Sharon's Polaroid dangling from her wrist.

"Just snapshots," she returned. "Not art."

He flashed her a quick smile. "Let's go, then."

Now, in daylight, Sharon could see the entire mountainside, red roofs and trees and gardens like a painted fabric flung over

the upthrust bones of the earth. Here was not a single straight line, no stark horizontals like the Punjabi plain or the American plain of her birth; here the world was designed in segments of circles, curving between earth and sky.

Another Buddhist monk strode past, prayer beads flowing from his fingers, intent on his own vision. A group of little boys playing ball parted before him like the bow wave of a ship. Sharon's stomach went hollow; she turned, and the monk turned at the same instant, as if startled from his contemplation. Their eyes met. "Sharon?" Richard called, and Sharon spun about, rejecting the man's knowing look and the unease in her stomach.

The school was on another ridge, facing the guesthouse. The gate was opened by a plump, middle-aged woman dressed in a shapeless Tibetan robe. She smiled and bowed; Richard bowed in turn, as gracious as a medieval grandee. The woman led them down a stone-banked path to a jumble of plaster and wood buildings, row upon row of potted plants, tall fir trees. A wide courtyard ended abruptly at a wall; children sat against the sun-warmed stone eating from small bowls. Beyond them the land fell away, disappeared, and in the distance rose again in tiers of rock and brush.

They left the boxes of magazines in a dim, low-ceilinged room where a cooking stove shed wisps of smoke over an opened CARE package. An ornate churn sat nearby. The woman handed Richard a steaming cup; Richard handed it on to Sharon, who took it and returned hastily to the open air.

Tea, strong as a liquor, churned with butter and salt. She coughed, and put a hand over her mouth to quiet herself. The voices continued unperturbed inside. A couple of the children, returning their bowls to the kitchen, giggled at the strange lady.

She tried another sip. It was familiar, somehow; perhaps she had tasted it in another life— A movement caught the corner of her eye, and she turned—a woman, dressed in rich brocade, a headdress of gold flowers and tinkling bells—

No. It was a young man, looking at her with a quiet curiosity. He was dressed in a European white shirt, pullover gray sweater, dark trousers, but he wore a Tibetan turquoise and silver necklace at his throat, and the planes of his face and eyes had been sculpted by the free wind of the mountains. He belonged on horseback, wearing robes of fur and felt, galloping across the high plateau of Tibet—

Sharon set her jaw against the importunities of her own mind. "Hello," she said. "I'm more or less with the Foundation."

"Ah, yes. One of our corporate benefactors." He had almost no accent, his intonation not the British-Hindi singsong of India, but American, flat. He smiled politely, sensing her puzzlement. "I was born in Lhasa, but left as a small child; my parents were political exiles. I studied in Switzerland and New York. Allow me—I am Trisong, schoolteacher."

The buttered tea seared her throat, drawing the blood into her cheeks. "Sharon Gardner," she said.

His smile widened. "The rose of Sharon, the lily of the valley—"

"You're familiar with the Bible?" she blurted.

"World civilization," he returned. "Would you like a tour of the school?"

"Thank you," A flash lit up the interior of the house; Richard was working. Might as well wander off for a while. She raised her camera, targeting the one small boy who remained sitting pensively against the mountain fastnesses. Trisong as a child, she thought. Exiled, his back to his homeland—how sad.

The picture emerged, a greenish-gray fluid; she thrust it into her purse before the image developed, as if she feared he had heard her thought. His dignity did not permit pity.

A small temple perched on a spur of the hillside, almost suspended in space. Sharon stood on the narrow path, dazzled; intricately carved and colored beams, scrollwork curling upwards to a tile roof, bright flags snapping prayers into the wind. "It's lovely," she said. She took another picture.

"I am told," said Trisong, "that this is only a pale image of the great temples of Tibet." He spun the prayer wheel that stood outside the gateway. Inscribed papers rustled inside the great cylinder as it turned.

"Hail to the jewel in the heart of the lotus," Sharon murmured, translating the words of the prayer to the Buddha.

He glanced back at her, surprised, flattered.

"World civilization," she told him.

The temple was dark, redolent of incense and dust. Long bolts of fabric hung from ceiling to floor, painted with fabulous beasts, legendary kings and monks, swirling demons. "*Thangka*," Trisong said. "Buddhist images on cloth."

Sharon considered one seated figure, a crowned woman serene among the circling, garish colors, preserved in an attitude of meditation. Her world seemed very much in control. Perhaps Trisong's was as well— "Your pilgrimage was in the wrong direction," she told him. "The East is full of young Westerners seeking inner peace along the Eightfold Path of Buddhism."

Trisong nodded solemnly. "The elimination of the desire which causes suffering, a release from the turning of the wheel—a tempting goal. And yet Westerners also say that the elimination of desire has kept us from progress."

"It depends on your definition of progress, doesn't it? Nuclear weapons, pollution, the extinction of species—including perhaps our own. I feel as I'm clinging desperately to the rim of the wheel, screaming, as it spins out of control."

"Stop screaming and climb into the center."

"The center cannot hold . . ."

"And the beast is slouching towards Bethlehem? Yeats, too, was afflicted with the Western malaise." Trisong's dark eyes were cool, opaque; she fancied he was mocking her, and she bridled.

"You're a Bodhisattva?" she demanded sarcastically. "You've achieved enlightenment, and have come back from Nirvana to help us disillusioned wretches . . ." She stopped, bit her lip.

"No," he stated. A frown stirred the depths of his eyes; his mouth tightened, cracking the calm mask of his face. "I have come here seeking my own balance between desire and pain, a spot between the rim and the center."

So you're a lost soul, too. A coincidence?

A stranger. She looked around, saw a stack of long, flat books, changed the subject. "Holy Scripture?"

"Yes," he said, exhaling. "Rescued from the Red Guards, the Cultural Revolution, by—secret workers." And the frown intensified.

"Ah," she said. This was difficult—she raised her camera like a shield before her, set the flash, and took a picture of the slender young man surrounded by gods and saints and demons.

A gilded clay statue sat in the place of honor at the end of the room, a row of butter lamps flickering before it—Sakyamuni, the Buddha, features smoothed with wisdom and with peace, one hand raised in blessing. Long silk scarves lay as offerings across the lap.

Sharon continued taking pictures, unable to speak. The flashes glanced off the gold statue, hissed in the dim corners. The clouds outside the door gathered thick above the valley, churned by an invisible hand. A cold blast of wind howled around the building, a predator seeking the warm flesh inside; the *thangka* rustled, painted dragons stirring into life . . . Sharon clutched the small camera so hard the plastic cracked beneath her fingers.

Trisong stepped forward, extending his hands in supplication over the guttering flames of the butter lamps. The tiny fires stead-

ied. The day was calm, the clouds pale fleecy blots of water vapor. Richard was calling.

Sharon took a deep breath. Stop it, stop it now— With trembling hands she put her pictures into her purse. She forced herself to look at Trisong; he still struggled with some thought. "Thank you," she croaked.

And yet he seemed to sense nothing wrong with her, as if he, too, had such visions. "Will you come back tomorrow? I could show you the *thangka* I am painting."

"So you're an artist as well as a philosopher." Her impulse was to run. But she walked out the door, pausing to spin the prayer wheel. It clicked over, whirring gently. "Yes," she said, "I'll come back tomorrow."

"Didn't you look at any of these?" Richard called.

Sharon groped for the towel, collided with the bottle of drinking water, knocked her toothbrush clattering into the sink. "I was too embarrassed," she returned. "I felt—like an intruder in his private world."

"I think your world lines crossed today."

Sharon emerged from the bathroom. Richard lay across the bed, the cardboard squares of her snapshots arranged before him. "Seal of approval?" she asked.

"Competent," he stated. "Good composition here and here; if you ever figure out how to set film speed you might make a decent photographer—with a decent camera, of course." He shook his head over the cracked body of the Polaroid.

"Damned with faint praise, as usual," Sharon said with a smile, and Richard looked up to throw her a wink. It was a moment of companionship; she really could trust him—

She sat down beside him to look at the pictures. And immediately she slipped again down that long, smooth, curve; her head spun, dizzy, her breath stopped short in her throat. "These aren't the pictures I took," she said.

"What?"

"I mean . . ." She groped for words. "Here, this wall and landscape—there was a child sitting there. Cute little guy, black hair, like Trisong. And here, this tapestry, Trisong was standing in front of it."

"Good clear focus on the painting," Richard said quickly, attempting to intercept her panic. "The face of this woman—a queen?—looks almost alive. So you didn't focus the others properly."

"But . . ." She fell back on the bed, her fist pressed to her mouth. If Trisong had stepped aside just as she raised the camera—if the lens had been smudged somehow— It came out in a rush. "I'm going crazy. Seeing things that aren't there, sensing, imagining . . ."

Richard laid the pictures down with a sigh. "Come on. Let's go for a walk before dinner. I'll even leave my cameras here."

She strolled up the path, clasping Richard's arm as if he were the only steady object in a reeling world. "Tell me about it," he said, and she did.

"And what if," he said at last, "what if your emotional overload of the last months has become focused here—we Westerners would call it an eddy in time, perhaps. A quantum wavefront, changed by your perception of it, causing an altered state of consciousness."

"The wheel," she said. "Turning by reincarnation, by the illusion of history—however you want to look at it. The universe as a dream, created by my own desire for—another reality." She laid her head against his shoulder; his arm tightened around her waist. And yet you could be my center, she thought. You could anchor this reality— But that might well be too much to ask.

A cemetery lay on the slope of the mountain, weathered markers jumbled in the sod like natural outcroppings of rock. The late afternoon sunlight was thick honey between the brushstroked shadows of the fir trees. The wind whispered through banks of gladioli and impatiens. "Fitzroy, Walker, Smalley," Sharon read. "They never made it Home, did they?"

"This was Home," returned Richard. "The weather, the lush vegetation—it reminded them of England."

"There is some corner of a foreign field . . ." She sighed. "Remember Benet's poem? 'You may bury my body in Sussex grass, You may bury my tongue at Champmedy. I shall not be there. I shall rise and pass. Bury my heart at Wounded Knee.'"

"'American Names,'" he nodded. "Is Home, then, the center?"

"Now we're Americans. Our ancestors were English. Maybe our remoter ancestors lived here. Reincarnation, history—"

He glanced at her, a quick sideways grin. "Well, those monkeys—"

"Richard," she began reprovingly, but in spite of herself she laughed. "All right. How do you cope so well?"

He grimaced. "I see the world through a camera lens—composition, color, light; maybe I make my own altered state. Maybe the Buddhists are right, and it's all just a magic show, an elaborate joke."

"Yes, maybe." The sun dipped behind the mountain; twilight flooded the cemetery. A raven screeched overhead and Sharon started. Sharp beaks tore her flesh from her bones, her blood spattered across the rocks—it was a mistake, she still lived in this body. "Can we go in now?" she said. "I'm very, very tired."

"Sure." He put his arm around her, shook her with gentle exasperation, guided her back up the path to the guesthouse.

Sharon awoke from a dreamless sleep—the dream, it seemed, was a waking one—to see a moving form just at the edge of the bed. A wizened little man crouched over a whisk broom and a dust pan, cleaning the floor.

Richard muttered something, nuzzling into her hair; she jabbed his ribs with her elbow and he awoke with an indignant snort. The sweeper continued across the tiles, inch by painful inch, as impersonal as if the couple in the bed were painted figures in an Ajanta fresco.

"Culture shock," Sharon whispered.

"Me too, honey; me too."

But the day had dawned clear and bright, the clouds swept away by a freshening breeze. The brown foothills were striped with the deep umber of their own shadows, as clean and precise and illusory as an Escher print. Beyond them shone the blue and silver of the Himalayas, a stained glass buttress supporting the curvature of the sky.

Sharon stood beside Richard as he changed lenses on his camera. "Breathtaking," she sighed. "One hell of a magic show."

"Mmm," he said, in a purr of satisfaction.

And there was the caravan, wending its way up a path, spear-points glittering, banners snapping with scarlet and purple. A tiny figure leaned out of the litter and beckoned; its hand held something that caught the sunlight, reflecting a white flare into Sharon's eyes.

The back of her neck crawled. She made an about-face into the house. It would be interesting, she told herself, grasping at the rim of sanity, to see if Richard's pictures showed the litter, the horses and yaks of the caravan. Later. Much later. Back Home.

After breakfast Richard announced he wanted to take pictures of the town. Shopping, Sharon thought. A harmless enough activity. And the school later, when her nerves were steadier.

Mussoorie had been a British hill-station, and a British hill-station it remained. Gingerbreaded timber and brick buildings, Blue Willow tea sets in the shop windows, the fragrance of

curry—a timeless Raj preserved under a Victorian bell jar. Sharon, in her present state of mind, fully expected to see Kipling's phantom rickshaw emerge from an alley.

She bought silk for a sari, an embroidered bedspread, carved shesham-wood trivets. She felt almost cheerful as she haggled with the merchants. Then Richard led her up the creaking steps of a Tibetan store.

With a chill of apprehension she ducked into the entrance. But the goods laid out for sale did not seem threatening, and her attention was drawn to a group of water-colors along one wall.

"Painted by the students at the Tibetan school," the shopkeeper told her. "Tibetan mythology, some historical tableaux."

It was the woman in the gold headdress, sitting next to a crowned man; another woman sat on his other side. The three made identical gestures of peace and reassurance. Silk scarves and clouds and crazily tilted mountains swirled around them, but their serenity was the calm in the eye of the storm.

Sharon took a step backwards, her lips tight with denial. She crashed against a string of brass bells, knocking them off the rack, and they rang harshly, voices pealing in the waves of sound. "Sharon," Richard began, reaching out for her.

Sharon turned, and came face to face with a steel mirror. Her own features were reflected in the polished metal, fair, genetically European—no. Even as she watched the smooth surface wavered, rippled, changed. Her eyes lengthened into almond-shaped darkness, her skin blushed deep gold, the bones of her cheeks and forehead molded themselves into flatter, smoother features. Her hair plunged down over her shoulders, straight, black, glossy—

Her hand moved of its own accord, knocking the mirror to the floor. It rolled crazily across the wooden planks and wobbled, clanging, to rest.

The shop was silent. The proprietor shrank back behind his counter. Richard stood with his mouth open, horrified. Sharon looked frantically around—the paintings, the Tibetan school—God, Richard, forgive me— She thrust her packages into his hands and ran.

The streets heaved beneath her feet, passersby turned with the glaring eyes and bared fangs of demons, the clouds followed her, howling—

Beyond the gate the path was quiet in the morning sun, and the soothing murmur of students busy at their lessons lay over the courtyard. This then, was the eye of the storm. Sharon slowed

to a walk, leaned on the wall, caught her breath. The valley sloped away before her; she reached out over the dizzying gulf of air, sliding down the curve of the wheel and off the rim, into space, into timelessness— Surrender to madness, she thought, and rest quietly forever.

"You would just come back again," Trisong said. "Reincarnated for another trip around the wheel."

She straightened, turned slowly around. Somehow she'd thought he wouldn't be there. But he was there, watching her, dark eyes unblinking, not smiling, not joking. "I came to see your painting," she said.

He led her to a whitewashed room littered with paper and brushes and splotches of bright paint, illuminated by a large window facing northeast to the mountains; he indicated the bolt of cloth spread over a table. The picture was almost completed. A caravan camped in a mountain pass, beside a lake whose surface was as smooth and clear as polished metal. The flags of the out-riders, the gilding of the litter and the pavilion, the hulking shapes of the yaks, were all reflected in a double, dream-like image. The sky was filled with an intricate pattern of clouds, the surrounding hills teemed with fantastic beasts, dragons and snow leopards and great antlered deer.

Only the central image was left unpainted, a dim gray sketch suggesting a woman's robed figure, a crown—

Sharon dropped onto a stool by the table. Trisong offered her a cup of buttered tea; she took it mutely from his hand and sipped, rolled the liquid around her mouth, swallowed. The taste and smell were echoes deep within her mind. An unnatural calm possessed her as she slipped away—another reality. Madness, and an eternity on the rim of the wheel.

"It is Princess Wen Cheng," Trisong said at her elbow. "She came from China in the seventh century to marry Songtsen Gampo, the ruler of Tibet; he was converted to Buddhism by Wen Cheng and by his other wife, a princess of Nepal.

"According to tradition, the most sacred Buddhist image in the Jokhang temple at Lhasa, which represents the Buddha Gautama not as a monk but as a crowned Bodhisattva, was brought to Tibet by Wen Cheng." He paused. "I have never seen it."

I have, Sharon thought. The lacquered image in the cart—

He shrugged away his thought, picked up a pencil, drew a round shape in the woman's hand. "The princess carried a mirror in which she could see visions of her home. But on her journey she broke the mirror, and it became the mountains of the Sun and

Moon. And she gave up her homeland, and journeyed on to Tibet. Renunciation, the elimination of desire, the center of the wheel."

The delicate pencil strokes shifted, forming the lines of a face—Sharon's own face, looking back at her from the cloth. "She must have been a Bodhisattva herself," Sharon murmured.

"She made a decision, and the deciding brought her peace."

Decision . . . yes—Sharon clenched her teeth so tightly that her jaw ached. "Is it possible," she asked, "to know our previous incarnations?"

"The Dalai Lama knows. He has the wisdom to deal with it. Perhaps it is merciful that the rest of us do not know."

"But if there were an eddy of time at the rim of the wheel, if somehow I knew, and could choose—" The circle in the woman's hand exploded, showering encampment, animals, mountains and lake with shards that gleamed more brightly than the thin northern light of the room—the mountains shifted, rocks tumbling, trees falling with roots in the air—dragons coiled and snapped and horses fled in terror—the princess with Sharon's face watched, impassive, as the world spun like a kaleidoscope around her, sliding into a new pattern—

No. Sharon slammed the tea down on the table and it slopped over the edge of the cup. "No, I am not her. She was a Bodhisattva, and she was released from the cycle of rebirth. I knew her, yes; I admired her. But I couldn't make her decision. I was caught between two lives, between two illusions, bound to the wheel and yearning for another reality—"

Trisong watched her, expressionless, as still and stiff as the statue in the temple. "I too," he murmured. "Caught between two lives—"

She inhaled, trembling, weak. "It's over now. I have this reality, this life—I surrender to that, and I won't be tempted by madness any more. I choose myself."

The painting was only that, two-dimensional colors on a cloth, the penciled figure of a woman holding a penciled mirror. Sharon leaned across the table, rummaged through a box of pens and brushes until she found an eraser. With a few deliberate strokes she blotted out the woman's face and removed the circle from her hand. She wetted her fingertip, picked up each particle of graphite that littered the cloth, shook it away.

And the smudged place on the cloth remained only a smudge, a quick sketch of a mannequin in fancy-dress robes, faceless, holding nothing. The beasts were stylized fantasies, the lake a thin sheen of northern sun.

Trisong laid his pencil on the table. "In deciding, peace," he said. "Surrender to my own life—"

"Yes." Sharon exhaled, unclenched her teeth, straightened. It was an adventure, a change of perspective. In the end, she had the strength to choose sanity. "And you?" she asked.

He said, "I had thought I was the only displaced soul, wandering the world, searching. Then you came, here to the eye of the storm. More than coincidence, I think." He took the eraser from her fingers and turned it in his hand, contemplating his drawing. "Thank you for showing me the path."

"Me? Showing you?" But their world lines diverged, and he remained silent, contemplating the drawing. "Well, whatever," she whispered. She turned and tiptoed from the room.

Richard waited out of breath at the gate. "Hey, are you all right?"

"Yes," Sharon replied. "Yes, I'm all right. Thank you for riding out the storm."

It was their last morning in Mussoorie. Richard stood in the courtyard, scanning the surrounding hills with his camera while the schoolchildren lined up for a picture. "What do you see?" Sharon asked.

"Just what's there," he answered. "I lack your peripheral vision, it seems."

"And that," she told him, "is what makes you so refreshing to have around." She raised her Polaroid and took a picture of him taking a picture, wheels within wheels—

The children were ready, two rows of shining cheeks and crinkled dark eyes. Sharon turned to the middle-aged lady and the old man beside her. "I had hoped to say good-bye to Trisong. Is he working somewhere?"

The woman frowned slightly. "Who?"

"Trisong. A teacher . . ."

The couple exchanged a calculatedly puzzled glance. The old man cleared his throat before speaking. "Miss, we have no teachers here of that name."

Sharon shrugged away the sudden rush of fear. No. That was over. "A young man, sweater, necklace—he was painting a new tapestry."

The couple continued shaking their heads. The children broke formation and ran shrieking around the courtyard. Richard replaced his camera in its case. "Let me guess," he said. "You're

the only one who's seen him." His hand closed firmly on Sharon's arm.

She shook her head. "No—I understand."

They took polite leave of the man and woman, and Sharon led Richard along the mountainside to the temple. The prayer flags snapped in the wind, the wheel creaked faintly as she turned it. She drew a long silk scarf from her purse and placed it in the lap of the golden image.

Richard was waiting, poised, for her to lapse into hysteria. "No," she said, to him and to the serene features of the Buddha as well, "No. No more of that. It's quite simple."

"Yes," Richard said encouragingly.

"Trisong said something about 'secret workers' in Tibet; he said he had never seen the Jokhang Buddha; he said something about a decision."

"So he went back, secretly, and the others are covering his tracks?"

"I think so." She turned. "See? That's real." There was the new *thangka*, its colors fresh and glistening; lake, mountain, caravan, princess—she was lovely, with her almond-shaped eyes and high cheekbones, brocade robes and crown. An ancient Chinese princess—holding a Polaroid camera.

"You tested me," Sharon smiled. "But I knew who I was. And who I am, and why. . . . Good-bye, now. I, too have work to do." She took Richard's arm, leading him from the temple, and she didn't look back.

Hand in hand they strolled toward the parking lot. A Buddhist monk, dignity in orange robes, walked with measured tread past them; he looked through them as if they did not exist in his spacetime.

"Richard," Sharon said.

"Yes?"

"I think it's time we got married."

He considered that a moment, smiling. "We could do a pretty good balancing act together, couldn't we? That's the way it should be; the essence of Buddhism, after all, is not in trying to find something you don't have, but in realizing something you've had all along—"

For just a moment she was giddy, but his hand was steady on hers, and the car was waiting to take them home.

Pan Am One left New Delhi at dawn. Sharon leaned against the window, watching as India receded into a gilded haze of sun-

light, dust and smoke. Receded into memory, and there was held timeless.

Richard yawned and stretched. "Tokyo. The camera stores on the Ginza. Then home."

"Home," Sharon repeated. "I do want to go Home now; but someday I'd like to come back here, when I'm ready."

"You were ready this time," he told her.

The staticked voice of the pilot spoke. "Mt. Everest can be seen off the tip of the left wing." She turned, and Richard looked over her shoulder.

Massed snow and cloud anchored the northern horizon. The earth was a shadow licking at Everest's feet, the arch of the sky a taut blue membrane pierced by the waxing moon.

And the same mass of snow and cloud anchored the southern horizon of Tibet; the great mountain called Chomolungma, too shy to show its face except on such a fine morning. Trisong's eyes were dark below the rim of a fur hat, the strap of a rifle crossed his chest, his pony moved restively as he paused to contemplate the dawn. A nomad again, like his ancestors, guarding the boundary between desire and pain—

I thank you, Sharon thought. She lay back, safe against Richard's shoulder, and the wheel of the world turned around her. ●



NEXT ISSUE

Our March Issue will feature a story many readers have long been asking for: the sequel to David Brin's popular piece, "The Postman." We think "Cyclops" is a novella well worth the wait. The rest of the Issue hasn't been set yet, but we do have some terrific stories in stock by John Varley, Jane Yolen, Octavia E. Butler, Marta Randall, and John Kessel. We can't promise you they'll all be in the March Issue, but some will! On sale February 14, 1984.



This is Gregg Keizer's second sale to this magazine, his first, "Broken Wings," having appeared in our November 1983 issue. In addition, he's made several appearances in *Omni* and has a story in the anthology *Perpetual Light* (Warners). After five years as a junior high English teacher, he's recently become assistant book editor of *Computer Magazine*.

By Gregg Keizer

art: Gary Freeman



WHAT SEEN BUT THE WOLF

"You should have killed Sverri when you came across him outside Hofstadir, the blood from that farmer on his hands," Bjorn said, looking midships where the pitching deck was open. Sverri's screams still came from there, but they were quieter now. Heltevir, his wife, was by him.

The image came too freely to my eyes. Sverri had been hunched over the warm body of the farmer, his hands dipped over the man's face, as if he was trying to wake him. Blood was everywhere; across Sverri's cheeks and forehead, up to his elbows, down his trousers. His eyes had been mad, their circles too bright in the dim moonlight.

"Kill him for what?" I asked. Bjorn was Sverri's only brother, true, but he had no reason to question my actions. Eight days since the night I'd come upon Sverri, six since we'd sailed, and this the first time we'd talked of it. Perhaps that was part of the problem with the voyage. We should have said all this before we fled Ice Land. "Kill him for murder? That was what it looked like. Kill a friend when he could easily have paid weregeld to the sod's wife? How was I to know Sverri was thought a werewolf?"

Bjorn said nothing, only looked into the rain that clouded the horizon. The storm would be on us quickly. "Yes," he finally said. "You did not see him while he was a wolf, as the farmer's sons swore. If only we'd not found the wolfskin around Sverri's waist." I was silent, tired of trying to explain the wolfshirt Sverri had worn. They believed what they wanted to believe, and nothing I said changed it. "We could have stayed, instead of on our way to beautiful Groenland." The last word was an oath. We'd heard of the lies of Eric the Red, the one who called a land of ice and rock *Groen*.

"It's too late for wishing," I said. "We are all here because of Sverri, but there are few of us who could not have stayed in Hofstadir. A few questions, perhaps some money spent, that would have been all. Everyone had a reason for joining Sverri in exile. Only you," I said, pointing to Bjorn, "and Heltevir had to run with Sverri."

"And you, Halfdan," a tall blond standing beside Bjorn said. I tried to put a name to him, but it took several moments. Thorvin. A friend of Bjorn's from his days gone aviking.

"Yes. It was unfortunate that the farmer's sons decided to fight." I rubbed the back of my head, feeling the lump only now disappearing. They'd held both Sverri and me until Bjorn had hacked his way into their longhouse and pulled us free.

"Enough," said a sharp voice. It was Eirik, his old, weathered

face twisted in anger. Or perhaps fear. He leaned a hand on the afterboat, the small boat, large enough for six, perhaps, turned upside down on the deck of the ship. He seemed to touch it with care. Did he expect we would have to flee in it if the ship broke up in the storm approaching? "Enough talk. The storm will be on us soon, and then what? Already we are two days past landfall in Groenland. How are we to reach land if that touches our sail?" He pointed to the dark wall of clouds to the northeast, off our stern.

"Halfdan is sailing master," Bjorn said, looking at me.

"Sailing master?" I asked, wanting to laugh, but finding only fury instead. "On this pig of a boat? It needs a swineherd, not a sailing master." I watched Bjorn, half-expecting him to swing. Tempers were short.

"It was not my idea to sail in this," he said softly, gesturing at the small merchant ship we sailed. It was a knorr, wide and slow, not like the longships I was used to sailing. Its fifty-foot length had seemed enough when we'd left Ice Land, but six days with thirteen and one madman had shortened it by far.

Bjorn was right. We'd had little choice of ships when we'd fled in the night from home. I laughed and the sound seemed to surprise all those around me. "I have never sailed this far west," I said. "I only have heard of this way, that is all. There is a difference between sailing a passage, and only listening to another's memory of one."

"Four days is the passage," Eirik said, his voice sounding as if he was afraid of saying it. "We are lost."

"Then we will find land elsewhere," I said, my laughter forgotten, my anger again tight in my throat. "*Vikings* have sailed around the world, and there always was land to be found. If we are lost from Groenland, what matter is that? Ice and bare mountains and little food is something I can do without. You?"

"We will try to find Groenland, Halfdan," Bjorn said, his voice an order that even I wanted to obey, for all my brave words. "I would not wish to be alone in the wilderness with my brother." He almost whispered the words. Those clustered around us glanced towards midships. I noticed Thorvin cross himself and wanted to spit. Christians among us, too. Wasn't Sverri Tryggvason, our werewolf, enough?

"Someone should stay with him when the storm hits," Eirik said nervously. He glanced towards me, then looked back to where Sverri was bound below the deck. "In case he is afraid, one of us could comfort him." It was too quiet when his words were gone.

"To watch him, you mean," I said loudly. "In case he breaks the bindings?" Eirik would not look at me. The men began to drift away, each to his own task before the storm. None stayed too long near midships.

"What of the animals?" I asked. There were two cows and four sheep huddled in the open well midships, their backs gray from the salt spray.

"Hope that they do not die of fright," Bjorn said, smiling slightly. "Hope that none of us die of fright." I smiled, but there was no laughter in me at his wish.

I looked at Bjorn and shook my head. "We'll live through this," I said.

"Will we?"

I listened to Sverri's distant screaming and wondered if I was right.

The storm came on us full of fury and horrible seas. The winds drove us south for three days, our ship wallowing in the troughs of the huge waves. It was impossible to calculate our course, for the sun was gone, hidden by the clouds, and the wind seemed to be backing; it came from a different direction than the sea ran. Then the fog smothered us. We were trapped in it for almost a day.

That was when we lost Ingolf, a cousin to Sverri and Bjorn. He went to the stern to piss, shrieked in a voice that made my heart cold, and was gone. We shouted for him, but the fog seemed to swallow our words. Bjorn found a spot or two of blood on the deck beside the steering oar, but that was all. Thorvin was at the oar, but he heard only a low moan before Ingolf yelled. Thorvin said it sounded like a pained animal, but it must have been only the wind, I thought. I stumbled in the dimness to Sverri's side, but the bindings were all in place, tight as before. It could not have been him. No one wanted to talk of it.

We let the ship ride before the wind, the sail furled and all of us sick from the gale. One of the sheep died and since there was no way to cook it, we had to simply skin it and heave the carcass overboard. Sverri quieted finally; the storm silenced his madness.

"Sverri, do you hear me?" I whispered to the shape in the dark. He stirred, then tried to sit up. I helped him edge back until he was against one of the knorr's ribs. "Sverri?" I asked, loud enough for only him to hear. I didn't think the others would want me talking to our werewolf.

"Hello, Halfdan," Sverri said, his voice even and sane. Where was his madness now?

"Do you remember?" I asked, sitting in front of him. Even so, it was impossible to see his face, for the clouds were still thick above us.

"How long has it been?" he asked.

"Eleven days since I found you on that farmer. Nine since we sailed."

He was quiet. For some reason, I wanted a light, so I could see his face. What if he was a wolf even now? I reached out my hand to touch his face, but stopped, unable to wish my arm to move further. My hand trembled, and I let it drop to clasp my axe.

"Groenland?" Sverri asked.

"We are off course," I said. "I don't think we will see Groenland soon." Again, Sverri was silent. "We are old friends. You have always been everything a friend should be," I said finally. "We have gone aviking together and you saved my throat that day in Frisia." I swallowed hard. "Did you kill Ingolf?" I put both hands on the axe. For the third time Sverri said nothing. "Sverri? Did you kill him as you killed that farmer?"

"Am I a simple murderer to you, Halfdan?" he asked quietly. "Is that all I am? Not even a madman?" I could not force the words to answer. "I have heard the others whisper of it, Halfdan. They think me mad, or worse. Do you?"

I shook my head, realized he could not see in the darkness and grunted a reply. Mad? I could not believe it. A murderer, yes, for I'd seen him hunched over the farmer's corpse. He had even had the madness in his eyes then, but all killings bring that on in a man. I'd killed, and knew that brief madness had glittered in my face as well. I remembered the sounds my voice had somehow made when the berserker madness caught me in battle. Sverri a madman? No. He had killed, but that did not make one insane, did not make one dangerous to old friends. How could Sverri be a madman for doing what I had done? How could he be mad, when I knew I was sane?

"Why don't you free me from these?" Sverri asked, and I heard the rustle of cloth as his hands appeared in front of my face. The bindings were tight, and even in the dimness, I could see they cut his skin.

"Do you believe I am a wolf, Halfdan?" I did not know what to believe. Everyone else seemed sure Sverri was a werewolf; the farmer's sons, Bjorn, all the rest of those on the ship. But we'd lived and sailed and fought together too many years for me to

believe he could be a shape-shifter without my knowledge. The two years since we'd returned from Norway, where we'd been *ulfhednar*, wolf-shirted warriors for the King, had been filled with whispers of the frightened rustics of Ice Land. Sverri had not laid aside his wolfskin, as I had, and so the sods thought him strange. I knew him truly, and even though I too believed in the power of the wolf-shirt in battle, had proved it to myself more than once while fighting for the King, I knew it did not make one a shape-shifter. His *ulfhednar* wolfshirt was what they found on Sverri after his murder, and though I had tried to tell them it was nothing, they hadn't listened to me.

Yet, even still, in the darkness and quiet sound of the sea, I wondered and had small doubts. Could he be a werewolf? How could I not have those doubts. Only a god can be sure.

"Do you believe, Halfdan?" he asked again. Did he lean toward me in the dark? Were those shapes before me his hands? No, he was bound tight, I tried to remember. "If you believe I am a wolf, Halfdan, then that is what I am."

I left him then, afraid of his answers if I asked more questions. Did I believe?

"We are seven *doegr* south of the Groenland Western Settlement," I said, still holding the *husanotra* in my hand. Bjorn was in front of me, but in the darkness, even though the sky was clear, I could only see his outline. He took the *husanotra*, the quarter circle of wood, from my outstretched hand and held it up so that its bottom edge was level with the horizon, the line where the stars disappeared into the sea. He lined the Pole Star with the curved edge of the *husanotra*, marked the place with his finger, then counted the notches back to the straight edge.

"Seven *doegr*." He sighed. "Seven days of good sailing," he said, finally agreeing with me that we were far from Groenland. "Where are we?" he asked, his voice quiet. More out of secrecy from the rest than for fear of disturbing their snorings.

I shrugged my shoulders, then realized he could not have seen the gesture. "West of Groenland, south of Groenland, I would say. Lost."

"Still no land," Bjorn said.

"There are plenty of birds. We'll see land in a day, perhaps two."

"Go north when we come to land, than back east?" he asked. I wondered if he would let me make the decision, or if he was only asking me to soothe my injured pride. We were lost, after all.

"What if we left Sverri here, then sailed north to the Western Settlement?" I asked. The thought came suddenly. Even if Sverri was no danger to me, he was to the others. His kin and closest friend he might still smile on. But the others? Wouldn't it be simpler to exile one, even though a friend, than to risk the death of several?

Bjorn snorted loudly, the sound waking the closest sleeper. I couldn't see who moved on the deck beside our feet.

"No?" I said. "Ingolf would disagree, I think."

"Ingolf fell overboard. The man could not hold his bladder." Bjorn's outline moved in the darkness. "Sverri had nothing to do with his death. He will come out of his magic once we are in Groenland. When he knows we are far from any of that farmer's kinfolk, he will cease his shape-shifting. Sverri is kin to me, remember that. I could not strand him."

I was silent. I'd decided Sverri had somehow murdered Ingolf. How, I didn't know; the asking of why was simpler to answer. Ingolf had most strongly claimed Sverri a werewolf. Sverri had not liked those accusations. That was what I'd decided. But it was not the time to argue, not when we were lost in an unknown sea none had heard spoken of.

"Sverri is inhabited by the White Christ's devil," a voice from the deck said quietly. Thorvin's voice. "That is what made him attack that farmer. That is what made him a werewolf." The voice was sure. I heard Bjorn swear under his breath.

"Only Christians could believe such foolishness," Bjorn said. Like myself, Bjorn had refused to take the cross in his hands and the White Christ into his heart. Thorvin, however, had not refused.

"Sverri is a murderer. Perhaps he is even mad enough to wear the wolfskin and think he could murder and not be found out that way. Perhaps he even thinks himself a wolf. But he has no devil within him." I had let my voice carry too loud, and more of the crew were waking. But I had little patience for Christians, even for the ones on board, the ones I knew.

"I will pray for him," Thorvin said. "I will pray for you as well, Halfdan Haukadale and Bjorn Tryggvason, so you will take the White Christ into you. Someday you will see that your gods are false." I heard Bjorn snort again. How many of the twelve sane on our knorr were Christian? I wondered. "If you had prayed for a safe voyage before we left home, as we asked, this would not have happened." Bjorn did not answer then, but I could feel his hatred in the air.

"I do not believe you are the same man who went aviking with me," Bjorn said after several moments. "You were not so pious then, Thorvin, for I saw you slit more than one Irish monk's throat. You have had more than one Irish nun under you."

Thorvin was on his feet, his voice roaring in the darkness, the skittering sound of a blade pulling free of its scabbard filling my ears. But Bjorn already had a hand on his lance. He must have touched it before he spit his words on Thorvin. I stepped back, towards the edge of the deck, one hand grabbing a walrus-hide line to steady myself, the other reaching for the only weapon I had with me, my hand axe. It was unnecessary, for as quickly as it had started, it was finished.

Bjorn was standing, his foot planted on Thorvin's chest, his lance through Thorvin's shoulder, pinning him to the deck. Thorvin moaned softly; that was the only sound. I wondered if any of us even breathed during those moments. Then it was past, for Bjorn jerked out his lance point and threw the weapon to the deck. He was kneeling beside his friend, his hands wrapped around the man's chest. No one moved to help, or interfere, when Bjorn hefted Thorvin in his arms and carried him to the hold midships, then gently lifted him under the forward deck. Someone in the dark muttered under the sigh of the wind on the sail. Whether it was a curse, or a prayer to the White Christ, I could not tell.

It was not as if we did not have troubles enough to last us this voyage, I thought. Now we had to worry about this sudden division, as well as what Sverri had become, and the fact that we were far from the known world. It was too much for even a saga. Too much to live through.

The dawn came on us too slowly, for Sverri woke and began screaming once more, adding to the cries of Thorvin as he lay dying on a pallet below deck. Heltevir, Sverri's wife, tried to stem the blood from Thorvin's shoulder, but it was of little use. Bjorn's lance had probed too deeply. Bjorn stayed at the steering oar the remainder of the night, telling everyone who came near to go away. He would not even listen to me when I came to talk about our course.

My nose had been right, for when the light was strong enough, land loomed before us. It was not Groenland, for my sailing directions had said I would see high mountains with huge glaciers behind them. A coastline much like Ice Land, the man had said. But this land was low, only an occasional hill showing above the

trees. That was the first thing I saw: the heavy green of the forests that stretched down all the way to the highwater mark, all the way to the cliffs that dropped into the sea. Even in the small bay before us, the trees walked almost into the very water, as if they were thirsty, or hungered for our ship.

"Thorvin is dead," a woman's voice behind me said. Heltevir would not look at me when I turned to her. Instead, her eyes were on the coastline off the port quarter. I could think of nothing to say.

"We will want to bury him here, I think," I finally said, to no one really, though Heltevir heard and nodded slowly. For some reason, though we had been out of sight of land for thirteen days, I did not want to step out of the ship onto that darkness of trees. Stupidity, I thought to myself, touching the hand axe next to me. There was no smoke curling above the trees, no savage Skraelings, the fierce natives the stories had warned about.

Then Sverri screamed again, and I touched Heltevir's arm, gently caressing it. What had we to fear from the land when there was a werewolf among us? I could not help but smile at the thought.

Bjorn threw the first handful of dirt into the grave. I watched as it covered the hilt of Thorvin's sword and splashed onto his sleeve. We'd laid him in a hole hacked among the roots of the trees towering all around us, and put the few things he'd brought with him alongside his body. A sword, two spears, his leather cap and shield, his axe, some meager food that we could ill spare. Bjarni, a Christian like Thorvin, had asked to bury his friend in their custom, but Bjorn had only stared him into silence.

"Could I say a prayer for his soul?" Bjarni asked. His words seemed to echo through the thick woods. Bjorn was silent, only watched as two of the crew, Kare and Ari, pushed the dirt back into the grave, then shoved more on top to make the mound. We'd gathered rocks earlier and I stooped down to set the first one in the soft earth, pushing it until it was half covered. Bjorn and the others helped make the outline of the boat that would carry Thorvin to Valholl, but three of the men, Bjarni, Thorstein, and Gudlielief, stood to one side. Only three Christians still with us, I thought. Unless some of the others helping set the rocks had changed their beliefs suddenly. It didn't matter, I decided, as long as they didn't try to bury me in Christus style when I died.

"Say your prayer if you wish," Bjorn said to the three Christians. "Thorvin is safe from the eaters of the dead, and on his way

to Odin's house. Nothing you mutter now will hurt him." And he walked toward the beach where the small afterboat was pulled clear of the water. I watched him, glanced at the ship riding on the short swells in the bay, and wondered if I should follow.

"Please, o Christ, listen to my prayer," Bjarni said, his voice too pleading for my liking. "Save Thorvin's soul so that he may see the gold of Heaven. Carry him to your heart and protect him from your devil. Save, also, the soul of Sverri Tryggvason and return him to the living. Banish the devil in his soul." I could listen no longer, and left the grave then, pausing only to kick a stone deeper into the dirt.

The air was cleaner once I left the shadow of the woods, and I could breathe easier. Bjorn was sitting on the rock-strewn beach, flinging pebbles into the water.

"It's as if Sverri has cast a troll's spell over all of us," he said as I sat beside him. "Ingolf drowned, Thorvin murdered by my own hands. What will be next?" I shrugged my shoulders. "What is next, sailing master?"

"North, then east to Groenland," I said.

"Thorvin is the first one I have killed in manslaughter," Bjorn said. "Plenty of Irishmen, a few of those strange people south of Frisia, but those died when I went aviking. Not like Thorvin." I remembered the faces of those I'd killed, of the many that had perished under an *ulfhednar's* axe. Only Sverri had made so many deaths, and again I wondered if he was truly a werewolf. Here, in the light, the thought almost made me laugh. In the darkness, I knew I might think different. Bjorn paused for a few moments, throwing more pebbles into the water. "Thorvin has two brothers and a father in Groenland."

That was why he worried. Not so much because he had murdered a friend, though that was enough to bother any man, but because of where we were to go. If Thorvin had living kin in Groenland, and they found out what had happened, as they surely would from Bjarni and the other Christians, then there would be a blood feud. Thorvin's kin would not rest until Bjorn and his family were dead. If it became bloody enough, it could extend even to those who had traveled and befriended a Tryggvason. Perhaps even me.

"I don't think the others will want to hear this," I said. The rest who had rowed with us from the knorr were still in the woods. How could they stand the darkness?

"You will stand with me," Bjorn said. "For Sverri, you will." He was right. I had left Ice Land because of my friendship with

Sverri; I had done this much and could see little profit in stopping now. "We cannot go to Groenland," he said.

"What if we went to the Eastern Settlement instead?" I asked. Bjorn shook his head. I sighed and said, "They would find us eventually, I suppose."

"South?" he said, looking out into the bay at the ship. I could hear the voices of those returning from Thorvin's grave.

"If we did not have Sverri around our necks, we could go home. None of Thorvin's kin are there."

"You do not mean that," Bjorn said softly. I wondered if he was right, for Sverri's voice came back to me as it had two nights before, when we'd talked. A shadow fell over us and I squinted into the harsh light to see Bjarni. "Did you want to talk to me?" Bjorn asked him.

Bjarni, Thorstein, and Gudlief stood close together. Bjorn and I stood as well, and my hand went on its own to the hand axe in my belt. I noticed the others in the background, Heltevir in their front. She was brushing her hand through her long hair. Not for the first time, I thought of her hair in my hands, but thrust the thought aside. She was married, married to my friend, married to our werewolf.

"What is it, Bjarni?" Bjorn asked, his hands crossed over his chest.

"What matter is this of yours, sailing master?" Bjarni said, looking at me. "You are not standing with this murderer, are you?" I said nothing.

"You will be left to rot here, Bjarni," Bjorn said. "Put away your madness, and everything will be forgotten."

"Thorvin was buried a pagan, not as a follower of the White Christ should be. He was murdered by a pagan. We are here because of a pagan's crime in Ice Land. Thorvin has avengers in Groenland, Bjorn. You would not live long even if you did reach the Western Settlement." Bjarni stepped forward and pulled his sword free from his belt. Its blade glittered in the sunlight.

"Stop it!" a woman's voice shouted, and I saw Heltevir push her way through the three Christians. "Do you think this is Ireland, and you are all gone aviking? Listen then," she said as she stood between us, her eyes almost as dangerous as Bjarni's blade. I held my breath to listen, and heard Sverri's screams from the knorr riding in the bay. The sound echoed off the short cliffs bordering the sides of the bay, bounced from each of the thousands of trees. "Listen, stupid *vikings*. That is why we are here in this wilderness. Do you think they will greet us with open arms in Groenland

once they discover my husband? Do you think that they will welcome any of those who sailed with a werewolf? It doesn't matter if they are Christian or not, they will think the same. That we, too, may be like Sverri. We were stupid to think that we could escape. The first ship from home would tell them stories. It doesn't matter if Thorvin has kin or not; no one would have wanted us even if he was standing next to us now," she said.

Bjarni still held his sword, though the point had dropped until its tip was close to the rock and sand of the beach. Heltevir exhaled softly.

"We can only go south," Bjorn said. "We cannot go to Groenland, nor back home to Ice Land. We must go south, where it will be warmer for the winter. It will be here soon enough, two months, perhaps more if we sail far south." Bjarni still stood quietly. "If you wish, you may take the afterboat and sail north to Groenland, the three of you. Any others who wish to join them, as well," he said, his voice carrying over the water. "You can have your share of food, your weapons—"

His words were interrupted by another scream from the ship. It was almost a howl, Sverri's cry, almost like the sound of a wolf from the edge of the glaciers back home. But that was not what stopped Bjorn's words, for the screaming howl was not alone.

An answering cry came from across the bay, from deep in the woods it seemed. The answer was even throatier than Sverri's, and the hairs on my arms moved of their own will.

"Another?" Bjarni whispered, and all I could think of was the memory of Sverri bent over the body of the farmer he'd murdered, yet now the face was different on the corpse. I tried to wipe my mind clean, but the face remained. It was my face. By Thor, mine.

"More wood, Eirik," a voice from the other side of the fire said, and the old man tossed another twisted piece of driftwood onto the blaze. Sparks climbed into the night air and I moved closer to the warmth. We had slept on ship the past four nights, and even though I had been glad, had felt safer with water between us and the noises that crowded the shores, the fire was comforting. Perhaps it had been only my imagination, but each night on ship I had believed I heard replies to Sverri's wolf howls. None of the others would talk of it, but each day everyone was more nervous than the last.

Heltevir was curled beside me, asleep, her woolen cloak tucked around her. I recognized it. Sverri had taken the red piece of cloth from a girl we'd not been able to force in our boat. Sverri had

killed her quickly, a blade thrust through her stomach, and laughed. Two years ago and more. It seemed like it had never happened.

"How many on guard tonight?" I asked the shape across the fire. We had seen no sign of Skraelings, the stooped and dark-skinned savages rumored to inhabit the unknown lands, but we would still post guard. There were other things besides savages to fear. Bjorn answered softly.

"Three. One by the afterboat, one near the fire, one by the treeline," he said. "Three hours and then wake another to take your place." The way he said 'your,' I knew he wanted me to take one of the first turns. But it was better than being on the ship another night.

The man next to me shuddered in the darkness. Not from the cold, for we were so far south that when the midday sun shone, it was almost straight above us. "I never believed in trolls," he said. It was Bjarni. He and his Christians were still with us. Heltevir had been right; no one would have welcomed us with a werewolf in our company. Bjarni knew her reasoning had been sound. "It was not a devil of the White Christ, it had no horns like the priests have told me, so it had to be a troll. Am I right?" he asked. I didn't know what to say to him, for I had only heard the screams the night before, not seen what had crept on board.

"It was a troll," Eirik said, throwing more wood on the fire. Heltevir stirred beside me. "I saw it plain in the moonlight. It had huge shoulders, and long, stinking hair. Like the underside of turf when you dig it up for buildings. And his hands . . ."

"Shut up," Bjorn said, and in the sudden flame from the new wood, I saw his face. He was afraid.

"Let him talk," said Thorstein, the young man near Eirik. Even in the dim light, I could see Thorstein's auburn hair gleam from the oils he smeared into it each morning. He was a distant kin to Sverri, but a Christian friend to the dead Thorvin.

"It may help us all to talk of it," I said quickly, hoping to get my words out before Bjorn swore. But he was quiet this time.

"Trolls, yes, they were trolls," Eirik said again after some time. "And they had troll blades that gleamed in the dark." The old man was telling a story, that was plain. Who should know better than another saga teller? He had seen *something*, of that there was no doubt, but he was stretching details to hold us in his story. What matter, I thought, for the end was the same. Trolls or not, something had come aboard our ship the night before and slit two throats.

"... and the blades seemed alive, in a way. I heard Ari cry out, struggle against the troll, but before I could get to him, he was dead. Then Thorvold screamed, but everyone heard that," Eirik whispered. "The trolls leaped back into the water and that was that."

"Perhaps they were Skraelings," I said, wondering at the same time if it had been Sverri. But I said nothing of that fear. He'd been bound with leather thongs since we'd sailed. How could he have done this?

"We've seen no signs of anyone," Eirik said. He was not going to give up on his troll stories so easily.

"That doesn't mean there is no one there. Just because we see no smoke, nor houses, doesn't mean Skraelings couldn't be about," I said. I stared into the flames for a moment, then jerked my head up as I heard a scream-howl from the ship. We'd left Sverri alone on the knorr. No one could stand his sounds any longer. Perhaps a troll, or whatever had killed Ari and Thorvold, would creep aboard again and rid us of our werewolf. That was not a friend's way of thinking, I knew, but I wondered how many of us still thought of ourselves as friends of Sverri.

"It doesn't matter who they were," Bjorn said and Bjarni muttered agreement. "We can't stay on the ship any longer. There's not enough room to swing a blade on it." He looked at the fire. *That* was something else we couldn't have on the knorr. The fire's warmth was comforting after so long sleeping cold, but the light was what made me feel safe. We might see what came to attack us this time.

"I'll take the treeline," I said as I stood and reached for my axe. Its haft felt good in my hand. The light from the fire quickly dimmed as I walked up the beach and towards the trees. The wall of them was complete; there was no break in their solidness. What kind of men crept onto your ship and murdered you in your sleep, I wondered as I sat on a fallen tree and tried to see through the darkness. Not a brave man. Not a man that had been aviking. Like one of those in Wales, who shot at you from afar with those strange bows of theirs.

Away from the voices of the others, I could hear Sverri's screams more plainly. Every time he howled, I winced, trying to will myself to stop, but it was impossible. The sough of the trees only half-covered his noises, and even when I pressed my hands over my ears, I could still hear him. For a moment, I thought of swimming out to the ship and slitting his throat, knowing that the others

would think another troll came to us. But the thought passed by, and eventually, I fell asleep.

I must have fallen asleep. I must have been dreaming when Sverri walked from the treeline and sat down beside me on the downed log. I was dreaming, so I did not fear him, even when he smiled and spoke to me.

"Halfdan, my friend," he said, "how is it that you are out here?"

Since I was dreaming, I answered. What harm in that? "Guard for the others," I said.

"Don't you want to know how I escaped the bindings?" he asked. I shook my head. "Ah, you believe this is a nightmare. It isn't, you know."

My axe was not in my hand; it must have fallen to the ground when I dozed. Now I wished it was in my hand, for something in Sverri's voice made me believe him. I touched his shoulder with my hand, and it was solid under his woolen shirt. He was no dream.

"How did you get off the ship?" I asked. I tried to look from the corners of my eyes for my axe, but I couldn't see it in the darkness.

"Do you believe, Halfdan?" Again the question of believing.

"In what?"

"In what I am."

"You talk with riddles, Sverri," I said, wondering if I could shout out for the others.

"It is in here, you know," he said, pointing to his head. There was light enough from the moon to see that. "Your belief is in here," he said again.

"Did you kill Ari and Thorvold?" Perhaps there were no trolls, nor Skraelings, who slit throats.

"Do you think I did?" It was useless, Sverri would never answer straight. My fright was past, and though I wished to feel my axe in my hand, I was not afraid of Sverri. How could I be? His voice was soft and sane, the same voice which had spoken to me for long years of friendship, the same voice that had comforted me in crazed battle for the King. What reason would he have to harm me? Even if he killed Ari and Thorvold—for whatever reason—I was safe. My friendship was my shield.

He stood and walked towards the trees, leaving me on the fallen log. Before he stepped into the woods, he turned back and looked at me. The shadows flickered over him, seeming to change his shape with every moment.

"I am what you believe me to be, that is all," he said and the shadows changed again as the trees behind him moved. For the

span of a breath, as my doubts returned, I stared and thought I saw a wolf, the gray hairs on its neck gleaming in the moonlight, its eyes yellow and blinking, but then it was gone. I rubbed my eyes hard, but there was nothing there; only trees and shadows.

Shouts reached me. The night was bright, too bright even for the full moon. Then I saw it. The knorr was ablaze from bow to stern, and the only thing I could think of was how strange the woodsmoke smelled as it waved towards the beach.

"Get the boat into the water," Bjorn's voice shouted. "Fast, before it's to the keel!" I could see several figures shove the afterboat from the beach and then jump into it as it slammed through the breakers.

I ran to the beach and grabbed the first man I came to. It was Thorstein, and he stammered from the excitement.

"Sverri's l-loose," he said, pointing to the ship. "Bjarni said he saw him leap over the side and swim for shore, just before the ship caught fire. Who would have thought . . ." he said, but I didn't let him finish, and instead ran down the shore. It was too late for me to help fight the fire on board; the men in the afterboat would have to do. I had to find Sverri.

My eyes were wide now, not half-closed by sleep. But it was useless looking for him here on the beach. He had struck for the trees, away from the light and the fire he'd set to hide his escape. I began calling for him, yelling his name out every few moments. Perhaps he was sane enough still to come to his name.

A screech of a howl answered me, and I turned to the sound, my arms suddenly far colder than they should have been. He was there, in the forest.

"Sverri!" I shouted. "Sverri, it's Halfdan. It's safe. Sverri!" I waited, and within a moment, his howl reached me. It was farther away this time. He was moving deeper into the woods.

He was truly a werewolf. Until this moment, I had not believed it. No matter what those farmer's sons had said they'd seen attack their father; no matter what Bjorn said about the wolfskin around Sverri's waist. Even Sverri's own words had not convinced me. Until now I had thought it all just troll-stories, like the tales I'd spun enough times in a safe and dry longhouse. But for that brief moment I believed in werewolves.

I stood beside the first tree at the edge of the woods, and wanted to go in after him, but I could not force myself to do it. My legs were weak, and my throat was dry, and the axe in my hand was almost too heavy to hold. So I turned away from the dark trees, and walked back to the beach, my eyes on the knorr, the fire still

burning in it. Sverri's screams continued to weaken in the distance.

I joined the three who stood on the beach and watched as the ship burned. There were five fighting the blaze, then, for now there were only nine of us. Though the light from the fire was bright, it seemed smaller since I'd first seen it.

"I think it was only the sail," Heltevir's voice said beside me in the dark. "Hope that is all he did," she said. A man next to her grunted a reply. I put my hand on Heltevir's arm and she moved closer to me, her warmth pressed against my side. "What will we do for Sverri?" she asked quietly. No one answered her.

We waited on the shore, watching the fire dwindle on the knorr, then looked hard into the half-dawn as the afterboat rowed towards us. The five men in it were soot-stained and singed around their eyes. Bjorn climbed over the afterboat's thwart slowly, almost falling into the water. I moved to help him and we stumbled onto the sand. He fell to the ground, rolled over on his back and breathed deeply.

"Can she sail?" I asked him, kneeling on the sand next to him. It took him moments to catch his breath.

"In time," he finally said. "The sail is gone, the mast is charred and weakened. It will have to be replaced. The animals are dead and part of the foredeck is burned through. It could have been worse." He paused. "Where is Sverri?" Bjorn asked, looking up at me. The light was enough to see his face now, though the sun had yet to rise over the water.

"Gone into the woods," I said. "I tried to follow him." Bjorn was silent. "I did not want to go into the trees to follow him," I said, and breathed easier when Bjorn and the others nodded. They would not have followed him, either.

"Sverri will return," Heltevir said in a whisper, her gaze on the forest to our backs. She was still pressed against me. "He will get lonely and come back to us before we leave."

I remembered my certainty that he was a true werewolf, and again had doubts. How could he be a shape-shifter when we had spent our lives together? How could he have hidden it from me? I recalled his voice, and the vision of the wolf I'd seen, and wondered which was true. What should I believe? Yet I knew that if Sverri came back to us, it would not be because he was lonely. If he was sane, and only a murderer, it would be because he was angry at the bindings he'd worn since we'd sailed; if he was truly a werewolf, it would be because he was hungry and could not find anything else to feed on. For the first time since we'd sighted this

terrible land, I wished it held Skraelings. Sverri would prey on those before he came to us, I hoped.

The winds swept over the bay and thundered against the turf walls of the longhouse we crowded in. There had been little to do since the storms had come for the winter except spend our time telling stories, talking about the voyage and what we had done and seen. That was the only consolation; that we had done and seen things no other dreamed of. We listened to the wind, listened to the noises from the woods that were still troll-filled to us, listened to the howls of the wolves that roamed the edges of the forest. Whether the howls were from real wolves, or from Sverri, it was impossible to tell. I tried to believe they were real, but it was not always easy.

We had pulled the knorr onto the shore long before and built low walls around her to keep the water out. It took several days, but we finally got her turned over and a vessel shed made so the ice would not split the strakes and make her unable to hold water. The new mast was cut and shaped, but not fitted. It would have to wait until spring.

The longhouse was not large enough for us all, especially since it was dangerous to venture outside for more than a few minutes at a time. The two benches that ran along the walls were barely large enough to hold us all when we slept, even when we had two guards awake during the dark hours.

Thorstein said he saw Sverri near the cliffs on the far side of the bay. He was in his human shape, Thorstein said, but he changed before his eyes into a wolf. I did not doubt his word. Signs of Skraelings were all about as well. Footprints along the shore, the glint of something bright moving in the hills behind us, a butchered caribou far in the trees. We had not been quiet as we cut wood, or fished from the afterboat. They knew we were here, but they did not show themselves. Perhaps they were afraid of us; though I wagered they were more afraid of the werewolf that haunted the edge of our camp.

"He has been gone too long," Bjarni said. I chewed on a piece of dried fish. "Three hours is too long," he said, looking at each of us in turn.

"Snorri can take care of himself," Bjorn said. Bjorn should know; Snorri was *his* house slave. "He has good reason to be gone this long. The snow is deep."

"We could look for him," Bjarni said.

"And get lost as well?" Thorstein asked, looking up from the piece of bone he whittled on.

"Something should be done." Bjarni said again, his voice quivering slightly. I wondered if he had renounced his faith in the White Christ yet. The other two Christians, Thorstein and Gudlief, had. Cold winds and werewolves were too strong for the White Christ, it seemed.

Another howl came from outside the turf walls and everyone looked up. It was close, that one. Very close.

I reached for my axe and went for the door. Bjorn was right behind me, and the others grabbed their weapons to follow us. The wind held the door closed for a moment, but I pushed hard and forced it open, then stepped into the snow. Light and powdery, it flattened easily, though even one step was work. The paths we'd beaten down in the snow before were covered by the recent fall. The howl came again, off to the left, in the trees not twenty paces away.

"What are you waiting for?" Bjorn's voice asked from behind me. I had stopped and not known it. My arms were cold, even through the thick furs.

"What?" I said, looking into the dimness of the trees, believing that I saw two points of light blink once, twice, three times.

"Move aside if you are going to stand and shake," Bjorn said loudly, pushing me to one side as he lunged through the snow for the trees. His lance was pointed up and in front of him, but still he was lucky when the wolf leaped from the woods.

I closed my eyes for only a moment, my heart thick in my mouth from my fear. I heard screams behind me, and the sound of teeth in front of me. Then I was myself, my axe lifted high above my shoulder, my eyes wide open.

The wolf had leaped onto Bjorn's lance point, and was struggling to escape. I could see the dull point jutting from the wolf's back. Bjorn was under the wolf, his hands in front of his face, warding off the death snaps of the wolf's mouth. I stepped forward, and swung the axe hard onto the wolf's neck. The axe was still sharp and cleaved the head from the body easily. Only then did I realize I was screaming like a beserker, only then did I feel the sweat slipping down my back and sides under my thick furs.

Bjorn wiggled from underneath the dead wolf, and yanked his lance from the carcass. We all waited for the shape-shifting that we thought would come when the dead wolf flickered into the form of Sverri, for we all believed at that moment that the dead animal was no more wolf than any of us. But the beast's shape

remained constant, and it was growing colder by the minute. The wolf's open neck finished steaming and still it was only a wolf.

A howl sounded across the ice of the bay. A dim chorus of the sounds reached us all, repeated. The blood on my axe was frozen, I noticed.

"Snorri is still out there," Bjarni said, his breath billowing in the cold air. "We must find him before dark."

"Before more of these find him, you mean," I said, pointing to the wolf on the snow.

"He is dead," Bjorn said. His voice was final.

"You cannot be sure," Bjarni said. "He could be close by, hurt perhaps by a wolf."

"Bjorn is right," I said. "Snorri is dead. He has been gone almost four hours. There are too many wolves to count around us." My unsaid words were clear to all; *Sverri may be near, Sverri may have killed again*. Was our friendship enough to protect me now?

"We could make sledges from the wood of the afterboat and pull them across the ice," Thorstein said, his oily hair glistening with the snow that continued to fall. The idea was ridiculous, but we were desperate. In the background, Eirik coughed quietly. He coughed too often, lately, and I wondered how long he would live before an illness took him.

"None of us would see home," I said, turning for the house almost lost in the swirlings of the snow. It was too cold, too dangerous, to remain here and talk. Sverri could be listening behind the nearest tree, he could be calling his new-found friends down on us within the span of a breath. I walked for the house, past the men who, like myself, had once called themselves *vikings*, but who now whispered for fears of trolls and werewolves. If I had not been so frightened, I would have taken the temptation and laughed.

The next three days we spent inside, not daring to venture where the wolves could get to us. We even pissed in the corner, throwing dirt into the hole after each use. The smell was enough to force tears, but the fear was stronger. None of us wanted to end like Snorri, more likely than not buried somewhere in the forest under a snowdrift. We talked louder with each passing night, trying to drown out the sounds of the wolves, but it did no good, for sooner or later we had to sleep, or pretend to, and then the noises came through the walls.

"It's mad to sit here and listen to them, all the night and day," shouted Bjarni from his bedroll. It was dark in the house, the only light from the hearth at the center of the room. All of us

were awake now. "They've got to stop!" he yelled, louder this time. "Stop it, make them stop it!" I was up and out of my furs, but there was already someone leaning over Bjarni, soothing him. Heltevir, perhaps. But it was doing no good. "Leave me be," Bjarni screamed and there was a thud of a body on the dirt floor. Then the door burst open and a needle-like spray of snow swept into the room. Bjarni was outlined in the doorway by the light of the moon on the snow. He had his sword in his hands, its tip pointed into the air.

"Sverri!" he screamed. "Sverri, you pagan, come to me. Come give your soul to the Christ, Sverri. You will thank me for it." He yelled each word into the wind, then ran from the doorway into the storm. By the time I reached the door, he was invisible in the snow, his tracks before the doorway already drifting shut. Thorstein, one of his once-Christian friends, wanted to push past me and follow, but I held him tightly.

"Are you as mad as he? He will be dead before he can breathe and shout another curse. Do you want to join the White Christ that much?" Thorstein struggled briefly, but not seriously. He knew I was right.

It was not as crowded in the long house now that there were only seven of us. We sat, most of the time in silence, and listened to the sounds from outside. Increasingly, we were on each others' nerves, taunting each other with silly things that should not have mattered.

Finally, the weather broke and the wolves disappeared with the storms. The snow melted quickly, faster than I had ever seen it in Ice Land. The ground seemed to swallow the snow in great gulps. It left acres of mud where the beach's sand and rocks ended. But at least Sverri and his kind were gone.

It was not yet spring, for the sun was not climbing high enough for that, but the clear, cold air made us feel human again, and we used the time well, getting things ready to sail once the ice in the bay broke. The sail was pieced together with what spare cloth we'd been able to salvage from the knorr, the hull was tarred with seal fat, and we split some of the immense birch trees for planking on the foredeck. Bjorn and I checked the knorr, looking for places where ice had gotten between the hull strakes, but the ship was sound.

We went nowhere without our weapons. Skraeling signs were everywhere, as well as wolf tracks which crisscrossed the mud and ended in the trees. Of Bjarni we found no trace, though we found Snorri's lances thrust in the ground at the edge of the forest.

One was broken, another had pieces of fur and feather tied to its shaft. Both the fur and feather were colored red, the color of dried blood, Bjorn thought. It was not actually blood, for it flaked off too easily. It was some sort of smeared paint. Skraelings? We could not decide.

The fifth day after the weather broke, I was gathering firewood at the edge of the trees, one eye watching the green darkness, one hand on my axe. But he still surprised me. Sverri had walked up behind me, and I hadn't heard a sound.

"Hello, Halfdan," he said, and I shouted and whirled all in one moment, swinging my axe in front of me. He was several feet out of reach, and he smiled as I let the axe drop. It was Sverri, by the gods, and he wore an *ulfhednar's* wolfshirt around his waist.

"Sverri," was all I could manage to croak.

"You do not believe still, Halfdan?" he asked. He spread his arms wide, as if he was inviting attack, then the smile still on his face, let his arms fall to his sides, his thumbs hooked in the wolfskin. I turned to see if there was any other in sight, but they were all in the longhouse, or the vessel shed. I did not want to cry out.

"What of Snorri and Bjarni?" I asked. "What have you done with them?" Sverri said nothing, only smiled. "Are you werewolf?" Again, no answer. I pulled my axe up to my chest and stepped forward toward him, but he only danced back lightly.

"I am what you believe I am," he said, speaking in riddles. Normally, I take fun at a riddle as easily as the next man, but not from this thing that was Sverri.

"And if I believe you to be a harmless rabbit that I can split with this," I said, holding my axe higher, "then that is what you are?"

"If you believe." He paused. "But you will not believe that I am a rabbit. I know you too well, Halfdan. You believe me as sane as you, a murderer as you've murdered. You believe me a friend who will not harm you. But not a rabbit." He was right. No matter how I tried to imagine it, he was not a rabbit. In the bright sun I could not even believe he was a werewolf. He seemed too much like the friend he had always been. I realized, even with my brief doubts, that I'd always thought him this. Perhaps mad at times, but a friend.

"Why did you burn the ship, Sverri?" I asked. I had the feeling that if I did not keep his attention with questions, he would flee. Or worse.

"The Skraelings think me a god," he said, ignoring my question.

"They are like children, in a way. I am going to stay with them, did you know that?" I shook my head. "You will leave when the ice breaks?"

"If the ship is ready."

"With only six men and a woman to sail her?" He did know Snorri and Bjarni were dead. We stared at each other for a long while before he spoke again. "Leave as quickly as you're able. Do not linger here. Tell Bjorn that for me." And he turned and was gone, almost as if into the air, for he moved so quickly into the trees that he was gone before I'd taken one breath.

I told no one of speaking with Sverri, just as I had not said anything of the first two times. No one felt love for Sverri, and I did not think any would take kindly to one talking to a madman. The madness might spread, they would certainly think.

But I thought long of what Sverri had said. He had spoken as sane as any of us, though his words and eyes had been unsettling. Why did he treasure the Skraelings so? What did they give him that he needed? What was it that we could not provide him?

"Halfdan! Halfdan, here!" Heltevir shouted from the low doorway. I turned from the broken lance I was tying together and the look of fear on her face made me stand and run to her. She looked out the door, and I followed her gaze. Down on the beach Bjorn and the others stood uneasily as a crowd of Skraelings walked towards them. At least three dozen, I thought.

They halted once they were within a score of steps from my friends. I reached behind me for an axe and ran to Bjorn, but the Skraelings did not seem to even notice me.

"We will be killed if they want it," Bjorn said to me. He held his sword in one hand, a shield in the other. At least everyone was armed, I saw, looking down the short line to Eirik, Kare, Thorstein, and Gudlief. Six against thirty-six; a battle would not last long.

The Skraelings were tall, almost as tall as I. Their hair was dark and hung loose about their shoulders, as mine did. There the likeness ended. They were red, completely red, for they had smeared something over their hair, their faces, and their bodies. Its color reminded me of the paint spread on the feather and fur we'd found tied to Bjarni's broken lance. And their eyes. They were wide, wider than any I had seen, the brown circle inside the eye wider than my thumb.

One walked apart from the others, and as he stepped forward, I heard Thorstein hiss. "Kill him now," were the only words I

could catch. But Bjorn stayed where he was and did not even raise his sword, for the Skraeling was stepping carefully to us, his hands held in front of him, the palms pointed up to show he held no weapon. He spoke in some savage tongue that I could not comprehend. Pointing to the ground, then to the forest, he nodded several times, then pointed back to us, all the while talking quickly as if we understood. He smiled, shook his head, smiled again, then pointed to the woods again.

"What does he say?" Heltevir asked from behind me. She had followed me from the longhouse. I wanted to tell her to go back, but I saw she held a lance. If the Skraelings decided to kill us, she would be as dead in the longhouse as here. Perhaps she might kill some herself if they threw themselves on us, so I said nothing. She wore the red cloak Sverri had given her long ago.

The Skraeling talked quickly, pointing to us again, then to himself. We were nervous, for it seemed he would order his people to attack, but he only motioned one man forward. The second Skraeling threw a pile of furs on the ground before us, then stepped back. Eirik leaned down and felt one of the pelts. "I've never seen anything like this," he said, and the first Skraeling grated a word or two out. The name of the beast whose fur it was?

I reached behind me to Heltevir, and pulled the cloak from her shoulders. Ripping a small piece from it before she could say anything, I walked to the Skraeling and handed it to him. He stared at the red cloth, held it against his own red skin, then waved it above his head. The red of the cloak was far brighter than the paint they'd smeared themselves with. The Skraeling seemed to think highly of the cloth for he motioned another man forward who threw more pelts onto the ground. We were already wealthy men, for I knew the furs would bring us enough silver to last a season of drinking.

The red cloth was quickly torn into enough pieces for all the Skraelings, and they in turn made piles of furs in front of each of us. One by one, each of the furs were named by the Skraelings, but the sounds were too strange and did not stick in my mind. Until the leader of the savages stepped forward, a wolfskin held out in front of him, and said "Sverri," loud enough for all to hear.

It was suddenly silent, the only noise the waves on the sand to our right. Gudlief crossed himself in the manner of the White Christ; Bjorn muttered under his breath and stepped backward without knowing it.

"Sverri," the Skraeling said again. The word was garbled, but understandable. It was certainly the name of our friend. The

Skraeling held out the wolfskin again, expecting us to take it, I thought.

Thorstein and Gudlielwhispered to each other, and I felt Heltevir's hand on my arm. "Can that be his skin?" I heard Bjorn ask, but no one answered.

"Sverri?" the Skraeling said, stepping forward and thrusting the wolf's pelt into Bjorn's face.

"By Thor . . ." Bjorn hissed, then moved back under the Skraeling's pressure. I saw Bjorn's sword moving in his hand.

"Sverri, sverri, sverri," said the Skraeling, stepping forward with each word. He pointed to us, then to the forest, then back to us, shaking his head, saying the name over and over.

"They want Sverri," I said, suddenly understanding the Skraeling's actions. He wanted to trade the wolfskin for our werewolf, for Sverri. The wolfskin they tried to give us was payment for Sverri, *was* Sverri in their minds. "Bjorn, they want to take Sverri from us," I said, turning to our werewolf's brother, but it was too late.

Bjorn was silent, but his face was blue with anger. His sword was above his shoulder and already arcing to the Skraeling's throat. I tried to reach for Bjorn's arm, but he was too fast, and before I could suck in a breath, the Skraeling's head was cut from his neck. Blood flew onto my shirt and the madness was on us.

The Skraelings screamed, and threw their hands into the air, but we gave them no quarter. At first I tried to stop Bjorn and the others, but it was useless, for the blood-lust was in them and they were mad. Then the Skraelings broke for the trees, and quickly the air was filled with arrows like the ones the Welsh shoot with their bows. Eirik went to ground, an arrow through his throat, and he flopped as a fish does before he died. Gudliel caught two in his legs and he screamed as he fell.

It was over as easily as it had started. The Skraeling were gone, all fled into the woods, all except the ones dead on the beach. Eight, I counted altogether. One stirred, pierced by a lance, but Thorstein drew his knife and put the man to sleep. Bjorn leaned over his knees and breathed heavily. His shield was full of arrows, and his hands were red from the dead Skraelings. I let my axe drop into the sand and knelt beside it and I was sick. I'd killed two of them, and they had not even raised their hands to shield their faces. Somehow it was different than killing Irishmen.

I dimly heard Gudliel moaning in the distance, and Kare's voice trying to comfort him, but did not concern myself with it. We had to leave as soon as possible, I knew now. The Skraelings would

be back for revenge, that was certain, and with their numbers, we would not live long in their attack.

"They have killed Sverri," I heard Bjorn say. I looked up, and he was talking to Heltevir. "That was his skin they cut from him."

"No," I said, wiping my mouth and the sourness from it. "They wished to trade for Sverri. The wolfskin was ours if we would leave Sverri with them. They think Sverri is a god."

Bjorn looked at me. "How do you know this?"

What could I tell him? The truth, that Sverri himself had told me this? Or some lie Bjorn would surely see through? "I've spoken with Sverri three times since we sailed. Last night he told me this. He said they thought him a god, and warned us to leave." It was the truth, though it did not sound like it, even to my own ears, when I said it aloud. But Bjorn believed it; his face showed that he did.

Heltevir spoke next. "You talked with him?" I nodded. "Then he was not mad?"

"Not always," I said.

"We must leave in the morning," Bjorn said.

"The ship isn't ready. We have the mast to fit . . ." I began.

"The afterboat will do. Four men could not sail the knorr. If we ran into any storms, we would drown." He was right. With Eirik dead and Gudlief unable to stand, for his legs were surely broken by the arrows, we did not have enough hands for the knorr. The six of us would fit into the afterboat, though it would be a tight sailing. "Everything but food and water and weapons must be left," Bjorn said. "Even those," he said, pointing to the furs still piled on the beach. A pity, for they would have made us rich.

We spent the rest of the day burying Eirik and readying the afterboat for the morning. All our possessions that we could not take with us we threw in a heap next to the longhouse. The furs from the Skraelings were tossed on top, then we added a layer of wood. When we left, we would put the torch to it all. There was no use leaving it for the Skraelings.

Night came too quickly, and we huddled in the longhouse, the fire bright, our weapons in our hands. We tried to talk of the battle, Bjorn even started to draw up a verse or two for it, but his heart was not in it. We all thought too often of Sverri and the Skraelings.

I waited until they were all asleep. Only Gudlief was awake, but his pain occupied him. I didn't think he saw me slip outside.

The moon was new, and the darkness was thick around my eyes. I waited until I was used to it, then stepped away from the

longhouse towards the woods. The trees were impossible to see. I could tell where they were only because they were darker than everything else. I stumbled many times, hitting my shins on logs, but I finally decided I'd come far enough from the house, and found a dead tree to sit on. I was not sure what I was waiting for, but I knew I had to wait.

"Sverri, old friend," I said to the shadow that moved in front of me. My arms were cold, and the axe heavy in my hands, but I kept my voice level. What if it was not Sverri, but a real wolf, or a vengeful Skraeling?

"Halfdan Haukadale," he said. It was Sverri, and I breathed easier. "You did not take my advice, Halfdan."

"We leave in the morning," I said.

"I told them that you would be dangerous," Sverri said. "But they wanted to see their god's companions, and trade."

"They offered skins for you," I whispered.

"I told them you were dangerous, but I didn't try to stop them. A god cannot stop his children from foolishness, can he?" Sverri paused. "Yet I did not expect your thirst . . ."

"It was over before it started. Bjorn thought the skin was yours, and he went mad. I could not stop him . . ."

"You tried so hard you killed as well," Sverri said.

He had been watching from the woods that morning, then. "We leave in the morning," I said again.

"The ship is not ready."

"We leave it behind. The afterboat will take us east. Perhaps all the way to Ireland. If we do not talk in our drink, no one there will know we sailed with a werewolf."

Sverri was quiet there in the darkness before me. He sighed and I wondered what he thought.

"Come with us," I said. "You are sane, Sverri. Come with us."

"Is that what you believe, Halfdan? That I am sane?" Still, the talk of believing. "The Skraelings believe me to be a god. A god who can alter his shape at will," Sverri said. In the darkness, it was difficult to see, but I can swear I saw Sverri's outline shiver, then slip into that of a wolf. Hot, sour breath came to my nose and the sound of an animal panting to my ears. Then the outline shivered again, and Sverri was there. "I am what is believed, Halfdan. In Ice Land, or Groenland, or even Ireland, what would they believe? That I was a god? I do not think so. A murderer, perhaps, like those farmers thought me, but no god. It would be the same everywhere. Werewolves do not kill for food; they kill for pleasure. That is what I would have to do, then."

I began to understand his concern with believing. "Then Snorri and Bjarni, Ari and Thorvold?" I asked softly.

"Their beliefs were too strong to ignore," Sverri said. "They died of what they believed would harm them here. Ari and Thorvold wondered of trolls, Snorri and Bjarni believed I was a werewolf. They believed they would be murdered, so that was what happened."

"And the Skraelings do not," I said. I thought I saw Sverri nod in the dark. "You wish to remain here, where you will not have to kill." Again, I thought I saw movement. "What *are* you, Sverri?"

"What you believe," he whispered. "You believe me to be a friend, a man, a sane man, so that is what I am for you."

"For Bjorn? And Heltevir?"

"They believe other things. I would murder Bjorn and become a madman for my wife. That is what they believe."

"Were you ever a man, Sverri?" I remembered the days long ago when we'd gone aviking and he had laughed as he killed a girl in Ireland. "Were you ever human, Sverri?"

"While that is what everyone thought of me, I was a man," He was quiet for some time. "While we were *ulfhednar* for the King, I changed, Halfdan. Too many enemies of the King believed the *ulfhednar* power, that we were truly werewolves in battle, and so it all began. Too many believed to ignore. Home to Ice Land was no different. Even Heltevir thought me changed from those two years with the *ulfhednar*. I was a man until the King called for me. But beliefs change, Halfdan."

So they did, for in the darkness there with Sverri, I wondered what would happen if I had doubts of my beliefs. I thought him a sane man, a friend who would not harm me, and so he was. What if that belief slipped from me and I thought him a werewolf, as Bjorn so obviously did? My answer came swiftly, for the hot breath reached my nose again, and a low growl came from the shape I knew would be that of a wolf, if only I had light enough to see. The image passed, and again it was only Sverri.

"Your belief is strong, Halfdan."

"Luck to you, Sverri." I stood and held out my hand, groping for his shoulder. Then it was there and I felt his hand on my shoulder. His fingers gripped my shirt tight.

"Thank you, Halfdan Haukadale. You always thought me a friend. I had no desire to be anything else for you." And his hand slipped from me and he was gone, through the trees, heading to the Skraelings who thought him a god. And so he was one.

It was near dawn and I felt more tired than I had ever felt

before. I wanted to sleep, forget everything Sverri had said. I knew I would not, and that thought tired me even more.

The wind and the currents were strong and though it had been only eighteen days since we sailed from Sverri's Land, already we had seen hints of land. First there was green moss in the water, and then several birds. They were the kind who lived in the south of Ireland, so that was where we would make landfall, I believed.

I believed. Two small words, but the difference between living and dying in the wilderness. I had tried to tell Bjorn, Heltevir, Kare, Thorstein, even crippled Gudlief, of what I knew, but the words always came out wrong, and they only looked at me strangely, as if I was a Skraeling and spoke an unknown tongue. Whether they believed me was not my concern. Their beliefs were their own, after all.

As we neared landfall, I could only remember when we left Sverri's Land. It was gray, and colder than it should have been, but we waded into the water, pushing the afterboat in front of us. When the water was deep enough, we each climbed in. Bjorn set the sail while I held the steering oar.

We each looked back one last time, seeing the smoke from the pile of goods we had set afire rather than leave to the Skraelings. There was movement in the trees, and then a figure stepped out of the darkness and onto the beach. Heltevir cried out, and Bjorn swore, but I only looked.

It was Sverri, waving farewell to us, a group of Skraelings behind him in the woods. He had on his leather helmet, a lance in his hand. He was just as when we went aviking together so many years ago, before the King called us to become *ulfhednar*, and forced the change on Sverri.

What Bjorn and the rest saw, I had no way of knowing, though I had guesses I thought would have been on the mark. A wolf, a madman, what did it matter? He was what he was, that was all. Each according to his own desires.

I was happy with what I believed, and would not exchange it for all the gold crosses in the White Christ's heaven. *Beliefs change, Halfdan*, Sverri had said to me in the dark that last night. *I hope not, old friend.*

For if they do, who then would you be? ●

The Crucible of Time

By John Brunner

Del Rey, \$12.95

There are several major authors I associate with each other, because of some shared characteristics which are apart from their highly individual voices. Robert Silverberg, Brian Aldiss, and John Brunner all began publishing science fiction in the early 1950s, and their voices changed in the mid-'60s, a sign less of their personal coming-of-age than science fiction's; they were the bellwethers of SF, proving that an author did not have to be a teen-age rebel to reflect what was happening in that turbulent decade. They all went on to write works of skill, intelligence, and sophistication, with a hard edge of realism that turned off those looking for an easy space opera or a romantic fantasy. "Cool" in the best sense is the word that applies to all three.

It's interesting that these three, in the past couple of years, have again showed a new quality to their writing, a sure indication that SF is again in a period of radical change, al-

beit less obvious—or at least less noisy—than twenty years ago. The change now has been more to the fantastical, the epic, and the baroque. Silverberg began his "Majipoor" cycle with *Lord Valentine's Castle*, a phantasmogorical quest that played out a fantasy against a science fictional background. Aldiss brought forth the first of a titanic series, *Helliconia Spring*, spread out on a gigantic canvas. And now Brunner gives us *The Crucible of Time*, equally extravagant in an entirely different way.

It's also epic; more in time than space, though it ranges across an entire world. This world, which is never named, is inhabited by an intelligent race; Brunner tells his story from its viewpoint. What makes this extraordinary is that this race is non-humanoid, and the differences are great; this is one of the major challenges an SF writer can set himself, and Brunner has met it triumphantly.

The "folk," as they tend to refer to themselves, are more kin to plants and insects than

anything mammalian. They reproduce by budding, and while a full description is never given, the author plants (as it were) enough clues to guarantee that their physical appearance is the stuff of nightmares. There are numerous references to their maws, claws, pith, tubules, mantles, eyes (one each) and ichor; the resulting put-together image is Lovecraftian—likeably Lovecraftian, curiously enough.

Not that Brunner anthropomorphizes them; they and their culture are very much a product of their physical beings and their alien environment. And among the differences from humanity is their aversion to violence (though weariness or hunger can bring on a sort of insanity which can lead to violence); there is also a quick intelligence and hunger for knowledge that seems wider spread than in mankind. The civilizations they build are complex and strange; only one of the strange complexities is that much of the "technology" is based on living things, plants and animals adapted and/or bred to a myriad uses, from communicating over long distances to the wonderful living ships in which they travel their seas.

The polypartate novel consists of seven incidents in the history of the folk and the story of those individuals most involved. Each is a major crisis in

the progress of the race: plague, an ice age, the deluge at the melting of the ice. Each results in both catastrophe and a giant step forward in knowledge, painfully held on to through the generally ensuing chaos.

It must be noted that Brunner has weighted *The Crucible of Time* with a second level; whether he weighted it down or added weight to it will very much depend on the reader's tolerance for this sort of thing. While the surface level has no references whatsoever to humanity, they are nevertheless worked through the fabric of the novel. For instance, nomenclature, proper and generic, much of which is punning or playing with words—human, English words: characters with names such as Toughide and Shrewdesign, and varieties of the living ships called junqs and barqs. And periodically the story comes close to satire, or even allegory, when the author takes swipes at matters such as academic infighting or religious cultism.

All of this is reminiscent of Olaf Stapledon; there is precious little science fiction that can be compared to his monumental works, but *The Crucible of Time* could be an extended section from the world and culture creating of *Star Maker*. It is not an easy novel, but then, even when John Brunner changes his course, one would

expect him to go against the wind.

The Seren Cenacles

By Warren Norwood and Ralph Mylius

Bantam, \$2.95 (paper)

"What's a cenacle, Dad?"

"Cenacle, son, is the word for the room in which the Last Supper took place."

The title of *The Seren Cenacles*, by Warren Norwood (author of the popular "Windhover Tapes" series) and Ralph Mylius, is about the only inobvious thing about it; the word "cenacle" pops up near the last page and then isn't explained.

Otherwise, it's one of those novels that starts with the mysterious incident—here an accident in a mine on the planet Euphrates—the unravelling of which leads to cosmic consequences. The incident involves a node of the (naturally) vital mineral that keeps the galaxy going (actually it's not a mineral, but I can't stop and explain everything), which resists the telekinetic mining technique of the psychominers and, in a peculiar way, seems almost to fight back.

To the rescue comes one Bedford, a Free Syndic (some sort of official, one supposes; the political background isn't made all that clear) who happens to be the one man in the Universe with an intelligent symbiote, called Issy. Issy thinks he is the

last of his race, and has been handed down in Bedford's family from generation to generation like a Chippendale break-front. The wise-cracking, limerick-making Issy isn't really a convincing age-old entity, and the woman in the case is almost equally unlikely. Kalissae is the mine manager, an uptight, green-skinned product of an extremely rigid culture who turns into a pussycat almost the minute she lays eyes on Bedford.

I don't think it's giving away too much to reveal that the recalcitrant node, of course, turns out to be linked to the past of Issy's mysterious race, the Seren. There's lots of intrigue and action (the mining company's security forces get involved, there are various space battles, the neighboring planet of Tigris is destroyed, and a lady Issy turns up), but much of it seems to be just filling time until the final revelation. The authors keep the plot spinning along speedily enough so that the undemanding reader might be amused if he/she doesn't stop to ask questions.

Godstalk

By P.C. Hodgell

Berkley, \$2.75 (paper)

P.C. Hodgell's *Godstalk* was published in 1982 in hardcover, and in that form created enough interest to make it worth checking out on its paperback release. It's a great, shapeless

mess of a novel, which even a list of principal characters, two maps, and three appendices don't help much in keeping track of. If the author also didn't have an absolutely extraordinarily fertile imagination and the ability to create a gallery of vivid people and creatures involved in the damndest situations, *Godstalk* would be a disaster. But she does, and it isn't. It turns out to be one of the most promising debuts in a decade.

Hodgell's major creation is the city of Tai-tastigon, a sprawling community of many temples and many gods. Tai-tastigon lies in a world that is in a series of parallel universes called the Chain of Creation which overlap in curious ways (and if you want to know any more about *that*, read Appendix 3); certain inhabitants of Tai-tastigon's world are from those other places. I'm not sure if the gods are, but they are all too real; the city is a chaos of conflicting faiths and rival deities, all manifesting themselves in various ways. There is even a Feast of the Dead Gods, when yearly those deities who have faded away for lack of worshippers come back to roam the streets, about which a character explains: "Some are harmless enough, but most are hungry and out hunting for sacrifices—which is fine if they relish potted begonias, but not so

good if their people were fools enough to raise them on baby's blood or virgin's hearts."

It's that kind of deflating humor that keeps Tai-tastigon and the screwball events that take place in it from overelaborate pretentiousness; it is one of the novel's saving graces. Into this pantheistic pandemonium comes Jame, a young woman of uncertain memory from the Haunted Lands; she is a Kencyr, who in times past came from elsewhere to act as champions and guardians against the encroachment of Perimal Darkling, a powerful being who is *not* nice at all. Jame, through pluck and luck, rises from the penniless starveling taken in by one of the city's many inns, to a position of power as the Talisman, able apprentice to a leading member of the Thieves' Guild.

This sounds pretty simple, but Jame's career is involved with the incredibly complex politics of the city, not to mention the provinces, the Thieves' Guild, the temples, the various priesthoods and all those Gods. Then there are the inhabitants of the Kingdom of the Clouds (who live on the city's rooftops and pop up—or down—at convenient times), various courtesans, and Jame's other profession as a dancing girl, based on a Kencyr skill that's something like tai chi. In all of this, some wonderful little moments al-

most get lost in the shuffle, such as the matter of the pathetic God, Gorgo the Lugubrious (known as Gurgle to the irreverent), who dies before our eyes for want of worshippers, but then is resurrected and is last seen chasing the bad guys down the street in His own personal thunderstorm.

If you think I can make any sense out of all this in this short space, think again. Confusion reigns in *Godstalk*, but what diverting confusion it is! I was reminded in the better moments of the fabulous Atlan novels of Jane Gaskell (among the highest of high fantasies); as soon as P.C. Hodgell fine tunes her writing and inventive talents, she will be a force to contend with.

C.S. Lewis

By Brian Murphy

Robert Silverberg

By Thomas D. Clareson

Starmont House, \$5.95 each
(paper)

The two latest additions to that neat little series, the Starmont Reader's Guides to Contemporary Science Fiction and Fantasy Authors, are *C.S. Lewis* by Brian Murphy and *Robert Silverberg* by Thomas D. Clareson, numbers 14 and 18 in the series. (The order in which they are announced is not necessarily the order in which they are published, if you're the kind

that worries about why the numbers aren't consecutive.)

Necessarily the general reference books on SF and fantasy that have been appearing in the past few years are limited in the space which they can devote to any single author. On the other hand, I can't really think of any living author who could take the weight of a whole book (though I *can* think of several who would disagree). The happy medium are these slim, handy magazine-sized books that should tell almost anybody all they want to know about the specific author and his works.

C.S. Lewis, of course, is not a living author, and his career and works have inspired more than a few lengthy books. In this case, though, it's a blessing to have a short work on him aimed specifically at readers of SF and fantasy; most of what's been written about him has concentrated on the theological aspects of his books. Here we have a chronology of his life, a biography, a chapter on each of the books of the Perelandra trilogy, a chapter on the Narnia books, and several bibliographies.

Robert Silverberg is very much alive and has had a prolific writing career, one with several twists and turns (see above). Clareson clarifies these neatly through chapters divided chronologically for the most part (up to *Lord Valen-*

tine's Castle), and the usual chronology and bibliographies.

If this were an academic journal, I'm sure I could find something to quibble about in these two studies (simply because one doesn't write for academic journals unless one *can* find something to quibble about); as it stands, they appear informative, uncomplex, and thorough within the limitations of their length.

My *one* quibble is not with the printed matter, but a cover. The series' covers show a drawing of the author against an illustration characterizing his work. That for the Silverberg volume is nicely science fictional, but the Lewis illustration looks like one of the raunchier rejects from *Spicy Space Stories*. Admittedly, *Perelandra* is one of the most sensuous SF novels ever written (I want to go to Perelandra when I die), but there's sensuous and there's sleazy; this one is sleazy.

The series backlist includes volumes on Delany, Sturgeon, Leiber, and Bester, among others.

Dangerous Visions

Edited by Harlan Ellison

Berkley, \$9.95 (paper)

Again, Dangerous Visions

Edited by Harlan Ellison

Berkley, \$10.95 (paper)

Anthologies come, anthologies go; they are the disposable

literature of the field, since the important stories they contain will continue to be published as *more* anthologies come. The exceptions can be counted on the fingers of one hand, perhaps half-a-hand (macabre thought). Two of *those* are linked, one being essentially a continuation of the other (anthologies can't really have sequels, *per se*): *Dangerous Visions* and *Again, Dangerous Visions*, edited by Harlan Ellison, and after too long a period, they are back in print.

The two are important not simply because they are whiz-bang collections of original stories by almost every important author writing in the field at the time they were published (1967 and 1972 respectively), but because they revitalized a portion of science fiction that was, to say the least, moribund at that point.

The short story, which had so long been *the* form for SF due to its confinement to the pages of magazines during the first half of this century, was dying on the vine in the 1960s. All too often the editors of the period seemed to think they were still back in the '40s, in the days of the puritan pulps (*Spicy Space Stories* may have had raunchy covers, but that's as far as it went), and regarded their readers as socially and sexually retarded adolescents whose mothers would send them nasty

letters if they printed anything for the mature mind.

Every author had unpublished stories which had been rejected because of this attitude, *not* because of lack of quality. An iconoclastic young author named Harlan Ellison collected a batch of these, and voila!—*Dangerous Visions*, an anthology that changed the course of a genre. The SF short story had come of age.

DV and ADV (which continued the tradition with a whole *new* batch of authors; things didn't change overnight) capture the spirit of a decade, when science fiction, as well as everything else, it seemed, was being permanently reforged. It is impossible to list the major authors and major works contained

in these two books; just as a token, three of them are Joanna Russ's "When It Changed," Samuel R. Delany's "Aye, And Gomorrah . . .," and Ursula K. Le Guin's "The Word For World Is Forest."

A note about this new edition of the two . . . both were in a sense watered-down on initial paperback publication. Because of length (supposedly), DV was divided into three paperbacks, ADV into two. Now we have them in their original form; one of the rare times when a trade (oversize) paperback seems worth it.

Books to be considered for review in this column should be submitted to Baird Searles, % The Science Fiction Shop, 56 8th Ave., NY, N.Y. 10014. ●



MARTIN GARDNER

(from page 112)

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SF CONVENTIONAL CALENDAR

by Erwin S. Strauss

The season for the major East Coast cons is coming up. It's time to make plans for social weekends with your favorite SF authors, editors, artists and fellow fans. For a longer, later list, an explanation of cons, and a sample of SF folksongs, send me an SASE (addressed, stamped #10 (long) envelope) at 9850 Fairfax Sq. #232, Fairfax VA 22031. (703) 273-6111 is the hot line. If a machine answers, leave your area code and number. I'll call back on my nickel. Send a #10 SASE when writing cons. For free listings, tell me about your con six months ahead. Look for me behind the Filthy Pierre badge at cons, playing a musical keyboard.

JANUARY, 1984

20-22—**RustyCon**. For info, write: Box 47132, Seattle WA 98146. Or phone: (206) 431-0911 (10 am to 10 pm only, not collect). Con will be held in: Seattle WA (if city omitted, same as in address). Guests will include: R. (Mythconceptions) Asprin, W. R. Warren Jr., J. Kaufman. At SeaTac Hyatt.

27-29—**ConFusion**. (313) 485-4824. Hilton Hotel, Plymouth MI. Mike Resnick, W. A. (Bob) Tucker, Fred ("Gateway") Pohl, Jack (Humanoids) Williamson, Joe ("Forever War") Haldeman, Don (DAW Books) Wollheim, F. Ackerman, S. Schmidt, P. Eisenstein, Martha Beck, Dick Smith. Classic Midwestern con.

27-29—**Corflu**. Claremont Resort Hotel, Berkeley CA. Terry Carr is toastmaster; the Guest of Honor will be chosen at the con. OGHu awards (takeoffs on the Hugo) will be presented. Fanzine workshops. This one is for fanzine fans—come and see what old-time fandom was all about.

FEBRUARY, 1984

3-5—**SFeraCon**, Ivanicgradska 41A, 41000 Zagreb, Yugoslavia. Bob (Slow Glass) Shaw. Free to non-Yugoslavs. SFera awards. Don't worry: it's at the other end of the country from Winter Olympics.

3-5—**OmniCon**, Box 970308, Miami FL 33197. (305) 253-6842. Ft. Lauderdale FL. True to its name, this tries to be all things to all people. It ends up mostly comics/films; but the weather is nice.

17-19—**Boskone**, c/o NESFA, Box G, MIT PO, Cambridge MA 02139. Gene Wolfe, editor Dave (ex-Timescape Books) Hartwell, artist Vincent DiFate. May be biggest non-media con except World Con.

24-26—**WisCon**, c/o SF3, Box 1624, Madison WI 53701. (608) 251-6226 (days), 233-0326 (eves). J.A. ("Amazons!") Salmonson, Elizabeth (Sardonyx) Lynn and others will demonstrate martial arts. Masquerade Workshops. Accompanied kids under 12 free. Traditionally, has a feminist emphasis.

MARCH, 1984

2-4—**ConCave**, Box 116, Park City KY 42160. Mike Lalor. 24-hour party room. Banquet. Very low-key.

2-4—**BayFilk**, Box 424, El Cerrito CA 94530. San Jose CA. About SF folk singing ("filksinging"). This is the annual West Coast con of the Filk Foundation. Membership fee includes midnight supper.

9-11—**CoastCon**, Box 1423, Biloxi MS 39533. R. (Horsecans) Adams, Jo Clayton, Steve Jackson.

16-17—**ExploraCon**, 105 N. Plaza Tr. #137, Virginia Beach VA 23452. Space exploration emphasis.

16-18—**MidSouthCon**, 1229 Pallwood, Memphis TN 38122. C. J. (Downbelow) Cherryh, M. Middleton.

16-18—**LunaCon**, Box 779, Brooklyn NY 11230. Hasbrouck Heights NJ (near New York City). Editor Terry Carr, artist Tom Kidd, fan Cy Chauvin. Time was when this was the only big East Coast con.

23-25—**NorWesCon**, Box 24207, Seattle WA 98124. This con usually draws a hundred or more authors.

AUGUST, 1984

30-Sep. 3—**LACon 2**, Box 8442, Van Nuys CA 91409. Anaheim CA. WorldCon 84. Join early and save.



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